

**EFFECT OF SUSTAINABILITY FINANCE PRACTICES ON ORGANIZATIONAL  
PERFORMANCE OF COMMERCIAL BANKS IN KENYA**

**BY**

**ALBERT NYAACHI OMARE**

**REG. NO: 09/02126**

**MASTER OF SCIENCE IN COMMERCE (FINANCE AND ACCOUNTING)**

**KCA UNIVERSITY**

**2023**

**EFFECT OF SUSTAINABILITY FINANCE PRACTICES ON ORGANIZATIONAL  
PERFORMANCE OF COMMERCIAL BANKS IN KENYA**

**BY**

**ALBERT NYAACHI OMARE**

**REG. NO: 09/02126**

**A RESEARCH DISSERTATION SUBMITTED TO THE SCHOOL OF BUSINESS IN  
PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF  
DEGREE OF MASTER OF SCIENCE IN COMMERCE (FINANCE AND  
ACCOUNTING) OF KCA UNIVERSITY**

**SEPTEMBER 2023**

**DECLARATION**

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for award of a degree. I also declare that this contains no material written or published by other people except where due reference is made and author duly acknowledged.

**Sign:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Albert Nyaachi Omare**

**Reg. No: 09/02126**

I do hereby confirm that I have examined the master's dissertation of

Albert Nyaachi Omare

And have certified that all revisions that the dissertation panel and examiners recommended have been adequately addressed.

**Sign:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Dr. Peter Njuguna**

## **DEDICATION**

I hereby dedicate this report to my family and friends for the emotional and moral support they have accorded me during my study period.

## **ACKNOWLEDGEMENT**

I acknowledge God's blessings that have been all round. I thank Him for the sound mind, peace, and the wisdom to be able to do this proposal. It would not have been possible if not for the support of my supervisor Dr. Peter Njuguna. Also, I would like to recognize the institution due to the opportunity they have given to me. I also wish to congratulate my fellow classmates for encouraging me to be the best and that the sky is not the limit. Times when I would feel like giving up, they gave me the encouragement to go on and finish what I began.

## TABLE OF CONTENTS

<b>DECLARATION</b> .....	<b>iii</b>
<b>DEDICATION</b> .....	<b>iv</b>
<b>ACKNOWLEDGEMENT</b> .....	<b>v</b>
<b>TABLE OF CONTENTS</b> .....	<b>vi</b>
<b>LIST OF TABLES</b> .....	<b>ix</b>
<b>LIST OF FIGURES</b> .....	<b>x</b>
<b>ACRONYMS AND ABBREVIATIONS</b> .....	<b>xi</b>
<b>OPERATIONAL DEFINATION OF TERMS</b> .....	<b>xii</b>
<b>ABSTRACT</b> .....	<b>xiii</b>
<b>CHAPTER ONE</b> .....	<b>1</b>
<b>INTRODUCTION</b> .....	<b>1</b>
1.1 Background to the study.....	1
1.1.1 Sustainability Finance Practices .....	4
1.1.2 Organizational Performance .....	5
1.1.3 Commercial Banks in Kenya.....	7
1.2 Statement of the Problem .....	8
1.3 Objectives of the Study .....	10
1.3.1 General Objective .....	10
1.3.2 Specific Objectives .....	11
1.4 Research Questions .....	11
1.5 Significance of the Study .....	11
1.5.1 Government and Policy Makers .....	11
1.5.2 Management of Commercial Banks .....	11
1.5.3 Scholars and Academicians .....	12
1.6 Scope of the Study.....	12
<b>CHAPTER TWO</b> .....	<b>13</b>
<b>LITERATURE REVIEW</b> .....	<b>13</b>
2.1 Introduction .....	13
2.2 Theoretical Review .....	13
2.2.1 Agency Theory .....	13
2.2.2 Stakeholders Theory .....	14
2.2.3 Legitimacy Theory .....	16
2.3 Empirical Review .....	18
2.3.1 Environmental Sustainability Practice and Organizational Performance.....	18

2.3.2 Social Sustainability Practice and Organizational Performance .....	22
2.3.3 Governance Sustainability Practice and Organizational Performance .....	24
2.4 Conceptual Framework .....	27
2.5 Operationalization of Variables .....	30
<b>CHAPTER THREE .....</b>	<b>31</b>
<b>RESEARCH METHODOLOGY .....</b>	<b>31</b>
3.1 Introduction .....	31
3.2 Research Design .....	31
3.3 Target Population .....	31
3.4 Sampling Technique and Sample Size .....	32
3.5 Data Collection Procedure .....	32
3.6 Data Processing and Analysis .....	32
3.7 Diagnostic Tests .....	33
3.7.1 Multicollinearity Test .....	33
3.7.2 Normality Test .....	34
3.7.3 Heteroscedasticity Test .....	34
3.8 Ethical Consideration .....	34
<b>CHAPTER FOUR.....</b>	<b>36</b>
<b>RESEARCH FINDINGS.....</b>	<b>36</b>
4.1 Introduction.....	36
4.2 Response Rate.....	36
4.3 Reliability Test.....	37
4.4 Findings on the Background of the Respondents .....	38
4.4.1 Respondents Age .....	38
4.4.2 Respondents Gender.....	39
4.4.3 Respondents Level of Education.....	40
4.4.4 Respondents Years of Experience.....	41
4.4.5 Sustainability Practices .....	42
4.5 Findings on Diagnostic Tests.....	44
4.5.1 Multicollinearity Test.....	44
4.5.2 Normality Test.....	45
4.5.3 Heteroscedasticity Test .....	46
4.6 Descriptive Statistics.....	46
4.6.1 Environmental Sustainability Practices and Organizational Performance.....	47
4.6.2 Social Sustainability Practices and Organizational Performance .....	50

4.6.3 Governance Sustainability Practices and Organizational Performance .....	52
4.7 Co-efficient of Correlation.....	54
4.8 Analysis of Variance (ANOVA).....	56
4.9 Regression Analysis.....	57
<b>CHAPTER FIVE .....</b>	<b>60</b>
<b>SUMMARY, CONCLUSION AND RECOMMENDATIONS.....</b>	<b>60</b>
5.1 Introduction.....	60
5.2 Summary of the Study .....	60
5.3 Discussion of Study Findings .....	61
5.3.1 Environmental Sustainability Practices and Organizational Performance.....	61
5.3.2 Social Sustainability Practices and Organizational Performance .....	62
5.3.3 Governance Sustainability Practices and Organizational Performance .....	63
5.4 Conclusion .....	63
5.5 Recommendation .....	65
5.5.1 Policy and Practical Implications .....	65
5.5.2 Limitations of the study and Suggestion for Further Study .....	66
<b>REFERENCES.....</b>	<b>67</b>
<b>APPENDIX I: INTRODUCTION LETTER.....</b>	<b>73</b>
<b>APPENDIX II: RESEARCH QUESTIONNAIRE .....</b>	<b>74</b>
<b>APPENDIX IV: RESEARCH BUDGET .....</b>	<b>78</b>
<b>APPENDIX V: LIST OF COMMERCIAL BANKS IN KENYA .....</b>	<b>79</b>



## LIST OF TABLES

Table 2. 1: Operationalization of Variables .....	30
Table 4. 1 Summary of reliability results for the study .....	38
Table 4. 2 Respondents' age distribution.....	39
Table 4. 3 Respondents' gender distribution .....	40
Table 4. 4 Respondents' education level .....	41
Table 4. 5 Respondents years of experience .....	41
Table 4. 6 Sustainability practices .....	42
Table 4. 7 Multicollinearity test results .....	44
Table 4. 8 Normality test results .....	45
Table 4. 9 Breusch-Pagan Test for Heteroscedasticity .....	46
Table 4. 10 Descriptive statistics on environmental sustainability practices.....	47
Table 4. 11 Descriptive statistics on social sustainability practices .....	50
Table 4. 12 Descriptive statistics on governance sustainability practices .....	52
Table 4. 13 Correlation analysis results .....	55
Table 4. 14 Analysis of Variance results .....	57
Table 4. 15 Regression analysis results .....	57

## LIST OF FIGURES

Figure 2. 1: Conceptual Framework .....	28
Figure 4. 1 Response rate.....	37

## **ACRONYMS AND ABBREVIATIONS**

<b>ROE</b>	Return on Equity
<b>NPL</b>	Non-Performing Loans
<b>UN</b>	United Nations
<b>NSE</b>	Nairobi Securities Exchange
<b>SMEs</b>	Small Micro-Enterprises
<b>SDGs</b>	Sustainable Development Goals
<b>ROA</b>	Return on Assets
<b>SACCOs</b>	Savings and Credit Co-operative Societies

## OPERATIONAL DEFINATION OF TERMS

**Environmental Sustainability:** Environmental sustainability is regarded as the overall responsibility among human beings to effectively conserve available natural resources while also protecting the global ecosystems to support health and well-being now and in the future (Jayeola, 2020).

**Organizational Performance:** Organizational performance refers to the actual output or results of an organization when compared to the expected output/outcomes (Gartenberg, Prat & Serafeim, 2019).

**Governance Sustainability:** Governance sustainability is a set of both written and unwritten laws that usually link ecological citizenship with both norms and institutions (Musa, 2020).

**Social Sustainability:** social sustainability refers to the ability to specify and manage both negative and positive effects of systems, processes, organizations and activities among people and social life (Jayeola, 2020).

## **ABSTRACT**

The study focused on the adoption and implementation of sustainability finance practices by commercial banks in Kenya and their impact on organizational performance. It highlights the challenges posed by unsustainable business models and the need for coordinated sustainability initiatives within the banking sector. The research aims to examine the effects of environmental, social, and governance sustainability on banks' performance, based on theories such as agency, stakeholders', and legitimacy theories. The study used a descriptive research design and targeted all 39 licensed commercial banks in Kenya. A sample of 117 senior finance managers were selected using a simple random sampling technique, and data was collected through a structured questionnaire. The findings suggest that banks in Kenya are actively engaged in sustainability practices, including the production of sustainability reports, environmental policy statements, staff training, and diverse board compositions. These practices have the potential to positively influence organizational performance by fostering responsible and ethical operations. However, the study acknowledges the need for more representative samples and continued efforts to address demographic imbalances in future research.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background to the study

In the past few decades, the world has frequently been faced with significant environmental governance and social challenges which have largely been caused by unsustainable business models adopted by many firms. Among the key notable challenges include the effect of global warming, increased human right violations, depletion of natural resources, toxic waste accumulation among others (Ali et al., 2020). It is a widely held belief that the globe has already used up about half of the natural resources that should be safeguarded for the generation (Global Risk Report, 2019). Based on such report, it is very clear that sustainability challenges constitute most other global challenges even such as the use of nuclear weapon.

To address potential issues with long-term sustainability, the United Nations (UN) initiated a programme that is now known as the United Nations Sustainable Development Goals (SDGs) (United Nations, 2015). These SDGs are built upon a common understanding between the UN members' states with the common focal point being that the future generations will also have access to crucial resources they will need to survive. According to UN Sustainable Development Goals, businesses are required to enrich their business models with factors sustainability finance practices environmental, social and governance factors (Ali et al., 2020). In line with those requirements, many businesses have domestically linked their business policies to the UN's sustainable development goals.

Globally, there are several different attempts under way to develop a standard protocol for the administration of sustainability problems. According to Jan et al., (2019), the two most important projects are the United Nations Environment Programme Finance Initiative (UNEP FI) and the Equator Principles (EPs). The UNEP FI is an initiative with the goal of encouraging

greater implementation of sustainability practices at all levels of operations among financial institutions. More specifically, the initiative intends to encourage the incorporation of environmental, social, and governance concerns into risk analysis. This initiative is a public-private partnership that was developed between UNEP and the finance sector players. It maintains tight relationships with over 200 members, many of whom are leading financial institutions, investment funds, and insurance firms, to create and promote linkages between sustainable banking and their overall performance (Jan et al., 2019) .

As a result of this, commercial banks and other financial organisations are extremely concerned about the overall impact of environmental depletion. This is although it is difficult to translate the basic frameworks that describe corporate climate initiatives within the banking industry (Lagoarde, 2019). This is since such frameworks typically concentrate on fundamental sectors such as the manufacturing one which are in much more contact with the environment due to the nature of activities, they engage in. As such, the most significant effect that climate change has on banks is indirect. However, banking institutions are impacted especially when the economic activities of their clients in general are impacted (Lagoarde, 2019).

Globally, Jan et al., (2019) while undertaking a study in Malaysia observed that the Islamic development banks are planning to invest up to 150 US Dollars to financially support the realization of SDGs within the next 15 years. Such effort by Malaysian Islamic banks shows how significant and important the problem of sustainability is, not just on the global stage but also about Islamic banking. This is because, poor quality and ineffectiveness of the sustainable business practises employed by Islamic banks can have a negative impact on their performance. This is abundant literature already exists that suggests a positive association between environmentally responsible business practises and the financial performance. Therefore, financial institution in Muslim countries, and Malaysia in particular, demonstrate sincerity in demonstrating sustainable financial practises during the development of their economies.

Africa, central banks in countries like Nigeria have established standard mandate that ensures that issues related to sustainable business practices especially environmental, social and governance ones among financial institutions are fully implemented and adhered to by those institutions (Erhinyoja, & Marcella, 2019). The mandate also stipulates that all financial institutions across Nigeria must submit a detailed report regarding their sustainability financial practices on quarterly basis for assessment. The basis and reasoning behind development of these sustainability guidelines is to ensure accessibility to foreign investment as such practices are highly practiced especially among developed nations. According to Said, Annuar, and Hamdan (2019), financial sustainability of micro-finance institutions (MFIs) is one of the key issues that has recently captured the attention of many scholars given its significance when it comes to the livelihood of these institutions. This according to the author is because unsustainable MFIs are more likely to hurt clients whom they were meant to help while discharging their intermediation services.

In another study done in Africa by Adu (2022) investigating the relationship between sustainable banking initiatives and their overall performance among selected banking institutions across Sub-Saharan Africa observed that governments and other policy makers across the region are increasingly putting up effort to encourage banking institutions in their respective countries to adopt effective sustainability practices especially the environmental given the severe environmental crisis in the region. To achieve this, many national governments are instating a few policies meant to encourage banking institutions as it is with other sectors to also adopt sustainability financial practices that conforms with the UN “Sustainable Development Goals”.

Locally, Kenya is a nation that is a signatory to the UN Framework Convention on Climate Change, the Kyoto Protocol, and the Paris Agreement. Over the course of the years, Kenya has exerted a significant amount of effort to modify the country's plans, influence its



policies, projects, strategies, and programmes, and to combat the effects of climate change (Kariuki, 2020). Although Kenya is dedicated to the programme for a sustainable environment, the government is aware that there is insufficient money for such sustainability initiatives. This is a problem that may be ascribed to the restricted number of public resources that are available to cater for such (Wafula et al., 2017). As a result, banking institutions in country have been urged to enable green investments in partnership with other institutions (Kenya Bankers Association, 2021). This encouragement has been provided by the Kenya Bankers Association (KBA) which is an umbrella group of licenced commercial banks in the country.

This is because, these financial institutions function as an intermediary, which enables them to access funds from organisations that are at the core of promoting environmental sustainability and channel such funds to investors who target profitable green projects. According to KBA (2021) report, the sustainable financing initiative journey in country began in 2009 and the initiative has been positively adopted by the commercial banks, and within Africa, Kenya may be one of the leading countries in the adaption of sustainable financing practices.

### **1.1.1 Sustainability Finance Practices**

Sustainability finance practices entails processes that ensures environmental, social and governance (ESG) elements are taken into consideration when making any investment decision within the finance sector to ensure long-term investment in sustainable economic activities and projects (Kariuki, 2020). The requirement that social, economic, and environmental problems be considered during development is the main idea that underpins sustainable finance practises. When it comes to economic growth, practises that promote sustainability ensure that social and environmental concerns are considered. Because of the significant contribution the financial sector makes to the overall growth of the country, it is essential for the sector to implement such initiatives. As a result, trends, and frameworks for reporting the social, economic, and

environmental aspects of the activities and operations of the company have been developed in many countries across the globe (Wafula et al., 2017).

Benefits associated with the implementation of sustainability finance practices among financial sector institutions include; (1) less cutting of trees since most of transactions are done online or electronically; (2) educating people about their environmental and social responsibilities in order to encourage them to adopt more sustainable business practises; (3) they allow loans to be issued at comparatively less interest rates owing to the fact that financial institutions place a greater emphasis on environmentally friendly issues; (4) preservation of the earth's natural resources is another of the fundamental tenets that underpin a sustainable and responsible financial enterprises and; (5) banks that adopt sustainable finance practises are able to apply environmental requirements for lending, which is a highly proactive approach that would enable environmentally friendly economic practises that would benefit future generations (Kariuki, 2020). Based on this, sustainability finance practices assessed under the current study will constitute environmental, social and governance finance practices.

In this regard, environmental sustainability is regarded as the overall responsibility among human beings to effectively conserve available natural resources while also protecting the global ecosystems to support health and well-being now and in the future. On the other hand, social sustainability refers to the ability to specify and manage both negative and positive effects of systems, processes, organizations and activities among people and social life. Lastly, governance sustainability is a set of both written and unwritten laws that usually link ecological citizenship with both norms and institutions.

### **1.1.2 Organizational Performance**

Organizational performance is the most important basis on which an organisation can evaluate how well it is moving towards the goals it has established for itself, determine its areas of

strength and weakness, and choose future initiatives with the intention of improving its performance in some way (Gartenberg, Prat & Serafeim, 2019). In most cases, market performance, financial performance, and the return to shareholders are the three main components that is looked upon when examining how an organization is performing. However, there are certain exceptions to this general rule as it can further be considered in terms of how an entity is performing financially over a given period.

The nature of the resources and information that an organisation has access to, the structure of the organization's management, the expertise of the individuals who are involved in the organization's operations, and the nature of the environment in which organisational staffs operate all have an impact on the organizational performance of a company. According to Anthony et al. (2019), organizational performance of a company can therefore be used to analyse how well a company is functioning in comparison to other companies operating in the same sector or even in sectors that are unrelated to the company's operational sector . It offers an accurate measurement of whether the available resources, in particular a company's capital and its assets, are being utilised effectively to maximise wealth and profitability. According to Gartenberg, Prat, and Serafeim (2019), evaluating the level of a company's performance may typically be done by examining the robustness of the company's balance sheets or the statement of comprehensive income to determine the extent to whether the company has been successful in its business endeavours.

Batchimeg (2017) posits that to establish the overall organizational performance of an entity, then it is very important to utilize various financial ratios as these are able to present a simple description of the present entity financial status in comparison with the previous periods. Such ratios are utilized to provide a crucial insight in terms of how the management of an entity can enhance their entity performance. The Return on Equity (ROE) ratio will be

utilized by in this study in order to assess the relationship between sustainability finance practices and financial performance among listed commercial banks in Kenya.

### **1.1.3 Commercial Banks in Kenya**

Throughout the country, a total of 39 banking institutions are licensed to operate for which some of which are owned by Kenyans while others are owned by foreign investors. Out of these, a total of 11 of these institutions are listed at NSE. The institutions are further classified into different tiers with tier one consisting of six institutions, tier two having sixteen institutions and tier three having twenty-one financial institutions (CBK, 2016). Some of these institutions also provide investment banking services in addition to business and retail banking services.

The banking industry exhibited strong financial performance in 2022, characterized by a significant increase in total operating incomes compared to total operating costs (Kenya Bankers Association, 2021). This resulted in a decline in the cost to income ratio, indicating improved efficiency levels. Total operating incomes grew by 17.7 percent, driven by a substantial rise of 93.6 percent in foreign exchange gains. Incomes from loans and investments in government securities remained steady on their growth trajectory. Meanwhile, total operating costs registered a slower growth of 13.4 percent. As a result, the industry's cost to income ratio decreased to 56.7 percent in 2022 from 58.4 percent in 2021. Additionally, the industry's net interest margin improved to 6.8 percent during the year, up from 6.5 percent in 2021 (Kenya Bankers Association, 2021). These figures demonstrate a positive performance and indicate improved efficiency and profitability within the banking industry in 2022.

The banking industry has also shown a remarkable commitment to embracing sustainable finance practices, recognizing the importance of aligning business goals with enhanced benefits for Profit, People, and Planet. To promote sustainable banking practices, the industry has placed a strong emphasis on capacity building. As of the end of 2022, more than

44 thousand banking sector employees have received training on sustainability, with over 27 thousand (representing slightly over 60 percent of total banking sector staff) completing seven mandatory modules specifically designed for their job roles. Moreover, the industry has taken several other initiatives, including promoting inclusivity for persons with disabilities and enhancing financial literacy among small and medium-sized enterprises (SMEs) as crucial elements in ensuring wider access to finance and fostering social and economic development. These efforts demonstrate the industry's commitment to sustainable practices and its role in creating a positive impact on society.

## **1.2 Statement of the Problem**

In Kenya, banking institutions are increasingly striving to adopt and implement sustainability finance practices. These institutions are involved in financing investment projects in climate financing, environmental management, housing, and energy sector. However, despite this, initiatives aimed at sustainability within the banking sector are diverse and uncoordinated, and therefore not likely to result in tangible long-term benefits for the society, environment and business community (Kariuki, 2020). In addition, banking institutions are investing heavily in sustainability projects to an extent of losing huge amount of money. For example, extensive adoption of green banking initiatives such as use of mobile and online banking services has subjected commercial banks to great risk as they have been targeted by hackers causing them to lose huge amount of money (Wainaina, 2019). In addition, use of mobile phones to take greener loans has left banks with significant portion of non-performing loans (NPLs).

Several statistics link sustainability finance practices to the organizational performance of commercial banks in Kenya. According to a study by the Kenya Bankers Association, banks that actively incorporate sustainable finance practices into their operations experience improved financial performance (Anthony *et al.*, 2019). The study found that sustainable banks recorded an average return on equity (ROE) of 16.6%, compared to 12.8% for non-sustainable

banks. In addition, sustainable banks displayed higher asset quality, with a non-performing loans (NPL) ratio of 7.5% compared to 9.3% for non-sustainable banks. This suggests that integrating sustainability factors into decision-making processes leads to more prudent risk management and decreases the likelihood of loan defaults. Another study by the United Nations Environment Programme (UNEP) revealed that commercial banks in Kenya that adopt sustainable finance practices have a lower cost of capital due to enhanced investor confidence (UNEP, 2020). This allows sustainable banks to attract and retain more investors and customers, positively impacting their financial health and overall performance. These statistics highlight a positive correlation between sustainable finance practices and organizational performance in commercial banks operating in Kenya.

According to Kenya Bankers Association (2021) report on sustainable finance in Kenya's banking sector indicates that the average level of NPLs among commercial banks was around 13.5% between 2018 and 2020 thus suppressing the average of 5% global recommended one. In addition, capacity building within the country's sustainable finance space is largely concentrated on supply side with employees within the banking institutions being the major beneficiaries leaving potential investors out largely without causing them not to invest their money towards this important sustainability initiative (Kenya Bankers Association, 2021). Based on this, the issue of adoption and implementation of sustainability finance practices within the banking sector in the country need a hybrid approach and not a synergistic one.

Poor bank performance can be linked to a lack of focus on sustainable finance practices. The failure to integrate environmental, social, and governance (ESG) factors into decision-making processes can result in negative impacts on profitability, reputation, and long-term viability (CBK, 2022). Banks that fail to adopt sustainable finance practices may face greater exposure to risks associated with climate change, regulatory non-compliance, and reputational damage. Additionally, CBK (2022) noted that by not incorporating social considerations such

as supporting financial inclusion or promoting diversity and inclusion, banks may miss out on opportunities to tap into underserved markets and strengthen customer relationships. Ultimately, poor bank performance can be attributed to the absence of a comprehensive and strategic approach to sustainable finance, which is increasingly recognized as a key driver of long-term success and resilience in the banking industry (Kariuki, 2020).

Based on this, several empirical studies have been undertaken examining the concept of sustainability practices within the financial sector. Rahi, Akter and Johansson (2021) examined how the financial performance among Nordic financial sector is affected by the adoption of sustainability practices. The study however presents a conceptual gap since it was undertaken among Nordic countries while the current one will be undertaken in Kenya. Kariuki (2020) examined the overall sustainability level within the Kenyan financial sector. However, this study exhibits a contextual gap since it considered the entire banking sector in the country while the current one will focus on those trading their stocks at NSE. In another study, Wainaina (2019) examined how the financial performance of Deposit-Taking SACCOs in Kenya is influenced by the adoption of corporate sustainability strategies. The study also presents a contextual gap since it considered the entire banking DT-SACCOS in the country while the current one will focus on those trading their stocks at NSE. Based on these studies, there is limited empirical literature existing on the concept of sustainability finance practices and financial performance. Therefore, this study seeks to expound on the existing literature by examining the effect of sustainability finance practices on organizational performance of commercial in Kenya.

### **1.3 Objectives of the Study**

#### **1.3.1 General Objective**

The main objective of this study is to examine the effect of sustainability finance practices on organizational performance of commercial banks in Kenya.

### **1.3.2 Specific Objectives**

- i. To examine the effect of environmental sustainability practice on organizational performance of commercial banks in Kenya.
- ii. To examine the effect of social sustainability practice on organizational performance of commercial banks in Kenya
- iii. To examine the effect of governance sustainability practice on organizational performance of commercial banks in Kenya

### **1.4 Research Questions**

- i. To what extent does environmental sustainability practice affect organizational performance of commercial banks in Kenya?
- ii. To what extent does social sustainability affect organizational performance of commercial banks in Kenya?
- iii. To what extent does governance sustainability practice affect organizational performance of commercial banks in Kenya?

### **1.5 Significance of the Study**

#### **1.5.1 Government and Policy Makers**

The government as well as other policy makers who are associated with the functioning of banking institutions such as CMA and KBA may benefit from the survey findings since it might give them hint as to how implementation of effective policies relating to sustainability finance practices is likely to enhance performance of these crucial institutions.

#### **1.5.2 Management of Commercial Banks**

Management of banks in the country may also benefit from this survey as its findings may serve as an important benchmark for implementation and adoption effective sustainable finance strategies and how doing so helps in enhancing their institutions performance. As a result of



this survey banks management maybe feel motivated to adopt effective sustainability practices since they know doing so could improve their performance.

### **1.5.3 Scholars and Academicians**

Lastly, the research findings from may also be beneficial to scholars and academicians as it adds to the partial literature pertaining to the study concept of sustainability finance practices within the banking sector. In addition, academicians striving to develop their academic work related to the topic may adopt some crucial materials from the survey that is likely to enable them to complete their surveys.

### **1.6 Scope of the Study**

Main objective of this survey is to scrutinize how organizational performance amongst those banking institutions in the country is affected by the adoption of effective sustainability finance practices. The key sustainability finance practices being addressed under the current study are environmental, social and governance sustainability finance practices. Targeted respondents under the survey will be all 42 commercial banks currently licensed and operating across the country. Researcher plans to undertake the study in the period between May and September 2023.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The section analyses the work of other researchers, academicians and scholars that have worked previously of empirical research relating to the concept of sustainability finance practices and commercial banks performance. As such, the chapter is structured into theoretical review, empirical reviews, conceptual framework and finally the operationalization of research variables is covered.

#### **2.2 Theoretical Review**

##### **2.2.1 Agency Theory**

The theory was pioneered by Jensen and Meckling (1976). The theory holds that there are typically conflicting desires and points of view between the principals (shareholders) and the agent (management), which results in agency cost. There are many different circumstances that might bring about such conflicts between the principal and the agents, however, the misalignment of the agents' goals and interests with those of the principals is likely to play a significant part in these disagreements. The agent theory provides a scenario in which a well-functioning market is envisaged, one in which there is perfect knowledge flow and effective monitoring. Another feature of such a market is the ease with which the incentives of the principals and the agents can be brought into alignment with one another. If the principals are unable to exert control over the way the agents are behaving, then for rewards and punishments to be instituted in order to ensure that the best behaviour is maintained (Vitolla, Raimo & Rubino, 2020).

The dynamic relationship that normally develops between the principal and the agent is one of the most important components that underpins this theory. As such, the theory has remained relevant and significant owing to the increase in the number of huge scandals that

have engulfed large corporates across the globe. It is common knowledge that the shareholders (who own the company) and the management of the company (who are in charge of management) have competing interests in the firm (Ali, 2020). Since shareholders are typically the firms' owners, then absence of enough transparency within the company will constitute to a significant rise in the level of risk. Sustainability financial practices, thus, improves a company's ability to minimise the extent information asymmetry, as well as the risks that investors perceive, increase market performance, and lower the cost of capital to a business entity. All these benefits come because of the company's ability to reduce the risks that investors perceive (Vitolla, Raimo & Rubino, 2020).

As such, the theory remains very useful when it comes to completion of the current survey since it explains how will be very useful in the completion of this study as it clearly explains how having a close relation between an agent and the principal is likely to lead an organization to achieve its desired goals. Therefore, by engaging in sustainable banking services, a banking institution may look desirable from investors point of view and attract them leading to enhanced performance. This theory will be used to guide the governance sustainability practice variable.

### **2.2.2 Stakeholders Theory**

The development of this theory is credited Freeman (1984). In accordance with this theory, considering the value of various stakeholders connected to a particular organization such as clients, staff, stakeholders among others is very crucial for such as an organization to be successful. Based on this crucial assumption, the theory has been adopted and applied consistently when it comes to corporate affairs since its development making it difficult to exclude in any given corporate model (Harrison, Barney, Freeman & Phillips, 2019). In simple terms, the theory illustrates that institutions must always be ready and willing to meet various expectations from their key stakeholders as opposed to only meeting those of their

shareholders. Based on this, the theory offers a significant platform upon which an entity can identify its key stakeholders to whom it should direct its sustainability efforts in its bid to enhance performance (Harrison et al., 2019).

According to Foss and Klein (2022), corporate managers who adopts and implement the assumptions as provided for under this theory can better understand their stakeholder's environment more precisely and manage it more effective within the nexus of their mutual relationship between them. Understanding stakeholder's environment is very crucial since corporate managers are expected to be accountable to them especially by providing sustainable services/products that is not likely to harm them now or in future. With such understanding, firms can be accountable to all their stakeholders as opposed to those on top only.

Based on this, the theory is deemed to a play a very crucial role in championing for firms to adopt and implement various sustainable practices. This is because the theory advocates for corporate managers to consider the needs of all their stakeholders as part of environmental, social and governance (ESG) practices (Foss & Klein, 2018). Collective consideration of the stakeholders needs by engaging in sustainable practices makes it possible for such firm to increase its potential investors base-level which is a crucial factor to increasing its overall performance.

A key strength of this theory is that it plays an important role when it comes to championing ESG practices by firms by encouraging firms to take care of their stakeholders needs such as protecting the environment within which they operate from instead of only focusing on maximizing the wealth of their stakeholders. However, the theory has been criticized by some people who indicates that it doesn't provide a clear definition of who is a stakeholder the company should focus on as it considers a large limitless group of individuals who if not properly attended to is likely to impact firm operations. The theory doesn't provide

a concrete specification of how relevant stakeholders should be selected from such a limitless group of individuals.

Based on this understanding, this theory may be of great importance when it comes to completion of this survey since it emphasizes that corporates should always be mindful of all their stakeholders in various ways such as environmental protection as this is key to improving their financial success. Therefore, stakeholders' theory will be applied in supporting environmental sustainability variable.

### **2.2.3 Legitimacy Theory**

Legitimacy theory was proposed by Dowling and Pfeffer (1975). According to the theory, firms must safeguard their socially acceptable status, and this can be explained through the legitimacy theory. Organization legitimacy theory can be defined as a condition or status that exists when the value system of an entity is aligned with the values of the social system of which the entity is part of (Dowling & Pfeffer, 1975). Thus, legitimacy theory can be applied to explain why companies adopt sustainable reporting practices like ESG in response to the global demand for sustainable reporting practices. This implies that companies may adopt sustainability practices to address perceived discrepancies between their value systems and that of key stakeholders (James, 2017).

According to the legitimacy theory, an entity must continuously demonstrate that its actions are legitimate, and that society perceives it as operating within acceptable norms and bounds (Şeker & Şengür, 2021). The homogenization of the relations between the external social responsibility of the firm and its internal social responsibility makes the legitimacy theory stand for the business ethics fundamentals (Şeker & Şengür, 2021). Legitimacy theory explains the behaviour of a company in developing and implementing voluntary environmental, social, and governance information disclosure (Baldini et al., 2018). The goal

is to fulfil the social contract that exists between the organisation and the society that allows the recognition of the former's objectives and for survival in the unpredictable and turbulent operating environment (Burlea & Popa, 2013).

In this regard, the legitimacy theory has been adopted by multiple scholars as a theoretical construct to explain the disclosure of ESG information by organisations and make viable predictions in empirical inquiries (Burlea & Popa, 2013). The pressure from internal and external actors and the firm's need to protect its reputation motivates the adoption of ESG practices and their disclosure in annual reports or through the media. Legitimacy provides a firm with the right to conduct its operations in line with the stakeholder's interests. While the theory previously faced criticism for only being seen as a convincing exploitation of managerial motivations while failing to indicate how adoption and disclosure by management may or may not promote accountability and transparency (Mahmud, 2020; Owen, 2008), its rich disciplinary background qualifies it as an ideal theory to anchor this study (Meutia et al., 2022). The disciplinary background culminates from institutional, management, and stakeholder theories.

Besides, legitimacy theory's sustainability in informing research emerges from the management heritage that connects conventional values and norms with modern ethics (Meutia et al., 2022). This explains why legitimacy has emerged among the conditions that should exist for a company's actions to be accepted by stakeholders (Martin-de Castro, 2021). The final reason for anchoring this study on the legitimacy theory is the presence of overwhelming evidence that suggests that executives adopt and disclose ESG performance for survival reasons instead of objectively declaring their proper social, environmental, and governance responsibility. Such an argument provides a strong basis to be sceptical on the reason banks adopt ESG practices and test if the adoption is related to meeting management objectives rather than for the pursuit of sustainability practices.

## **2.3 Empirical Review**

This part of the report is focused on examining the existing empirical research that has been done on the topic of the study. In the context of academic research, the term empirical review refers to the process of analysing the prior research projects that have already been carried out by a variety of other researcher based on the same field of study. This is done with the goal of gaining either direct or indirect experience in terms of the researchers' observations on the topic at hand.

### **2.3.1 Environmental Sustainability Practice and Organizational Performance**

Globally, Akhter, Yasmin and Faria (2021) examined the extent to which the adoption of green banking practices influenced how commercial banks performed financially in Bangladesh. Data was obtained by analysing the audited financial statements of the selected banks for the period between 2019-2018. The study indicated that more than 90% of the commercial banks listed on the Dhaka Stock Exchange had implemented the majority (above 60%) of the green banking policy recommendations supplied by the central bank. However, the implementation of certain policies, such as the periodic reporting of green banking practises in a standard format and with external verification (policy 3.2), the customer education programme (policy 2.5), and the development of a climate risk fund (policy 1.9), are not at a level that is sufficient as they were only implemented by fewer than 70% of the banking institutions. The findings of a correlation and regression analysis pointed to a beneficial relationship between environmentally responsible banking practises and financial performance among the analysed banks. The study exhibits a conceptual gap as it was done in Bangladesh whereas the current one will be done in Kenya.

Lian, Gao and Ye (2022) examined how the performance of banks in China is affected by issuing of green credits to their customers. To do this, the researcher adopted unbalanced panel data that was obtained from 34 commercial banks from across China for the period

between 2007-2015. Fixed effect model was adopted. The findings indicated that performance of banks across China was significantly impacted by the issuance of green credit to their customers. In addition, the favourable effect of issuing green credit was established to arise from the rate of return on interest-bearing assets held by the bank as well as greater support from the government since engaging in green development can easily increase the economic development. The study however presents a contextual gap since it was undertaken in China whereas the current one will be undertaken in Kenya.

Jayeola (2020) conducted survey to examine how the implementation of environmentally sustainable practises impacts the performance outcomes of SMEs in both Netherlands and China. The purpose of the research was to determine whether or not there is a correlation between environmental sustainability and the performance results of SMEs in terms of the growth of revenue and profits. The sample consisted of 332 different businesses from the Netherlands and China. According to the findings, there is a favourable and significant relationship between environmental sustainability and performance. According to the guidelines, businesses who are more likely to communicate with their workers about the measures they are taking to improve their environmental impact will have better results in terms of developing profits. To obtain the necessary support to continue out their operations, organisations need to demonstrate that they are successfully meeting the expectations of the public and building the credibility of their businesses. The study exhibits a contextual and conceptual gap as it evaluated performance of SMEs in Netherlands and China whereas the current one will evaluate performance of listed banks at NSE.

Munir, Irfan and Malik (2022) examined how the financial performance among banking institutions in Pakistan was impacted by their adopted sustainability finance practices. Secondary data were gathered from the consolidated financial statements of twenty different public and commercial banks for the period between 2010 and 2020 to conduct the analysis.



STATA was used to conduct the analysis on the data, during which ARDL, the Unit root test, and the Hausman test were all tested. The overall scores of economic, social, and environmental sustainability practices were established to have different impact on business performance. Specifically, economic sustainability had a positive and significant, social sustainability had a negative and significant, while environmental sustainability had a negative and insignificant effect on the firm's performance . The study exhibits a conceptual gap as it was done in Pakistan whereas the current one will be done in Kenya.

Fathihani and Saputra (2022) conducted a mini-quantitative literature review examining the relationship between environmental sustainability finance and financial performance across the globe. Analyses of 30 peer-reviewed journals was used to conduct reviews on sustainable finance. The findings of these reviews were summarised in two tables, including article journal and publisher distribution as well as article category based on the article. According to the findings, there is a clear and considerable beneficial connection between sustainable finance and the financial performance of banks. This study concluded that businesses have started to adopt sustainability practises, which has a positive impact on their financial performance and survival, and many organisations are beginning to implement the principles of the Sustainable Development Goals (SDGs) into their business operations. The study exhibits methodological gap as it involved reviewing of peer-reviewed journals whereas the current one will include use of both primary as well as secondary data sets.

Kinyondo and Huggins (2021) did a survey examining the extent to which the concept of environmental financial sustainability had been implemented by SACCOs across Tanzania. Audited financial reports were scrutinized upon which data to use in the study was obtained between 2011 and 2020. ROA was utilized to examine the SACCOs environmental financial sustainability concept. To examine the relationship between environmental financial sustainability and SSCCOs performance, a linear regression model was applied. As per the

results, it was discovered that around 60% of SACCOs examined had implemented environmental sustainability policies in their bid to operate sustainably. The study exhibits a conceptual gap as it was carried out in Tanzania while the current one will be carried out in Kenya. In addition, the study exhibits a contextual gap as it targeted SACCOs while the current one will target banks trading at NSE.

Mangwa and Jagongo (2022) examined the extent to which financial performance among banks trading their stocks at NSE is impacted by issuance of green financing. To attain this, empirical approach was utilized in which case secondary data was extracted from already published reports of the various institutions covered under the study. Upon analysis, it was discovered that that a favourable and significant impact exist between the issuance of green financing and overall performance of the studied institutions. However, the study presents a methodological gap as it involved use of empirical approach whereas the current one will use both primary and secondary data.

In another study, Thairu and Abuga (2022) examined how the performance of manufacturing companies trading their stocks at NSE is influenced by them taking green loans. Descriptive survey approach was adopted. All nine firms involved in manufacturing activities and trading their stocks at NSE were selected. A total of 81 senior managers from these firms were sampled. Both primary and secondary data sets were utilized. Data was then subjected to analysis using SPSS software. Upon analysis, it was established that a favourable and significant nexus existed between green loans and overall performance of manufacturing companies trading their stocks at NSE. The study however presents a contextual gap since it examined manufacturing firms while the current one will examine listed commercial banks.

### **2.3.2 Social Sustainability Practice and Organizational Performance**

Rehman, Zahid, Rahman, Asif, Alharthi, Irfan and Glowacz, (2020) did a study in Pakistan that analysed whether participating in social sustainability practice enhanced the performance of Islamic banking sector. Panel secondary data was obtained from the annual reports of all four fully-fledged Islamic banks that had been operating in Pakistan from 2012 to 2017. According to the study findings, it was established that a substantial negative association existed between social sustainability and the financial performance of the sampled firms when utilizing Ordinary Least Squares (OLS), Panel Corrected Standard Errors (PCSEs), and Generalized Least Squares (GLS) statistical methods. In terms of the individual dimensions, the association between the environmental and social dimensions of sustainability practices and the present performance was notably positive. The study exhibits a conceptual gap as it was done in Pakistan whereas the current one will be done in Kenya.

Bătae, Dragomir and Feleagă, (2021) examined the nexus that existed between social sustainability and financial performance within the European banking sector. Data was collected from the Refinitiv database for 39 European banks, for the period 2010–2019. The findings obtained indicated a positive relationship between emission reductions and financial performance. However, a bank's accounting and market performance may be at odds with its product quality and social sustainability policies. Moreover, an increase in the quality of a bank's corporate governance system was found to negatively affect company financial performance. The study exhibits a conceptual gap as it evaluated selected European banks whereas the current one will evaluate listed banks in Kenya.

Malik, Jais, Isa and Rehman, (2022) conducted a study examining the role of social sustainability for financial inclusion and stability among Asian countries banks. A generalized method of moment's estimation was utilized. The findings point toward a positive association among social sustainability, financial inclusion, and financial success within the Asian banking

sector. Furthermore, financial inclusion was observed to be undertaking a partial mediating role between social sustainability and financial success within the Asian banking sector. The study exhibit both conceptual and contextual gaps as it evaluated the role of social sustainability for inclusion and sustainability among Asian states banks whereas the current one will examine how social sustainability influence financial performance among banks trading their stocks at NSE.

Wasara and Ganda (2019) conducted a study at the Johannesburg Stock Exchange (JSE) to investigate how the disclosure of corporate sustainability related to the performance of companies listed there. The purpose of the study was to determine whether there is a correlation between the disclosure of company sustainability and return on investment. The research focused on ten mining companies that are now traded on the JSE. It was discovered, using a technology that was designed to collect data on sustainability characteristics, that environmental disclosure had a negative relationship with the return on investment. For the sake of maintaining enterprises' ability to compete in the future, it was suggested that those firms declare their activities regarding social responsibilities. The study exhibits a conceptual gap as it was done in South Africa whereas the current one will evaluate listed banks in Kenya. In addition, the study presents a contextual gap since it evaluated all companies listed at JSE while the current one will only analyse listed banks at NSE.

Aifuwa, (2020) sustainability reporting and firm performance in developing countries. The study employed a systematic content analysis approach. Existing literature reviewed revealed inconclusive findings regarding the effect of sustainability reporting on firm performance. However, a significant number of published works demonstrated a positive correlation between sustainability reporting and the performance of businesses. Secondly, it was revealed that financial performance measures frequently employed by researchers include profitability measures (ROA and ROE) and market-based measures (EPS and DPS), as well as

the fourth iteration of the Global Reporting Initiative (GRI) framework for calculating the sustainability disclosure index through content analysis. Thirdly, it was discovered that the level of sustainability disclosure in developing countries was lower than in developed nations. The study presents a contextual gap as it evaluated the concept of sustainability reporting whereas the current one will evaluate the concept of sustainability finance practices.

Emojong, Wanyama and Manini (2018) did a study examining the relationship between corporate sustainability and financial performance of manufacturing firms in Uasin Gishu County, Kenya. The research employed descriptive survey methodology. The study population consisted of 3,344 employees from all 12 manufacturing firms registered with the Kenya Association of Manufacturers in Uasin Gishu County, from which a representative sample of 357 employees was drawn. The data was collected using a structured questionnaire. Both descriptive and inferential statistics were utilized to analyze the data. Environmental practices had a statistically significant impact on financial performance, according to the study. The study also found that corporate accountability had a statistically significant impact on financial performance. In addition, the study found that social justice had a statistically significant impact on the financial performance of manufacturing firms . Statistically speaking, the relationship between corporate sustainability and financial performance was significantly influenced by government policy. The study presents a contextual gap since it evaluated manufacturing firms across Uasin Gishu county whereas the current one will examine listed banks at NSE.

### **2.3.3 Governance Sustainability Practice and Organizational Performance**

EmadEldeen, Elbayoumi, Basuony and Mohamed (2021) examined the extent to which board diversity influence performance of non-financial firms listed at London Stock Exchange (LSE). Cross-sectional data that was obtained from LSE with a total of 3,961 observations being made between 2000 and 2016. Upon analysis, it was established that age diversity had a positive

impact on the performance of firms which is an indication that inclusion of younger people within the board tend to enhance the overall performance of such firms. On the other hand, education diversity was also established to have a positive effect. Gender diversity on its part was established to have a positive effect which means that inclusion of equal gender balance within the board tend to enhance firm performance. Lastly, nationality diversity also had a positive effect on overall performance of the targeted firms. This study however presents a contextual firm since it targeted non-financial firms trading at LSE whereas the current one will target banking institutions trading their stocks at NSE.

Iqbal, Nawaz and Ehsan (2019) examined the relationship between corporate governance and financial performance of microfinance across Asia. A panel dataset that covered the years 2007–2011 and including 173 MFIs located in 18 different Asian nations was utilized. Various corporate governance aspects were analysed including board size and makeup, characteristics of the CEO, and different types of ownership. After that, we proceed to make an estimate of the two-way link that exists between this index and each of the five distinct financial performance measures. The findings obtained provided further evidence that there existed a strong correlation between corporate governance and financial performance of MFIs across Asia. The study exhibits a contextual gap as it evaluated MFIs in different Asian countries whereas the current one will examine commercial banks trading at NSE.

In another study, Rahi, Akter and Johansson (2021) examined how the financial performance among Nordic financial sector is affected by the adoption of sustainability practices. The research looked at a representative cross-section of observations of 39 financial institutions located in the Nordic region throughout the course of the business years 2015–2019. Indicators pertaining to environmental, social, and governance sustainability were examined from the Thomson Reuters Eikon database in July of 2020. A generalised method of moments and regression were the two statistical approaches used in this quantitative study. The

researcher used both static and dynamic estimators and came to the conclusion that sustainable banking practises had both positive and significant effects on FP. The researcher also found out that governance sustainability was positively correlated with a high ROA.

Further, Musa (2020) examined the nexus between corporate governance and financial performance of Nigeria listed banks. The study relied on secondary data collected from the annual reports of fifteen banks that traded on the Nigeria Stock Exchange during the years 2013-2019. In this study, a panel data approach was used on 15 different banks giving rise to, 45 different firm-year observations. In order to investigate the impact that the predictors have had on financial performance, the random effect model was utilised. According to the findings, the correlation between a free and independent board of directors and ROA was not statistically significant. It was revealed that both the board meeting and the ROA had a negative significance. However, there was a negative and insignificant correlation between ROA, board size, and female representation on the board. The correlation between board age and ROA was discovered to be one that had a negative significance.

In another study, Guney, Karpuz and Komba (2020) investigated the extent to which board structure impacted the corporate performance among non-financial firms trading their stock at EASE. Primary data was obtained from all the firms selected. Upon analysis, it was established that board size had an inverse but significant influence on the selected firm's performance. However, board diversity such as presence of foreigners within the board had a favourable and significant influence on the firm's performance. However, the study presents a contextual gap since it analysed firms trading their stocks at EASE whereas the current one will evaluate only banking institutions trading their stocks at NSE.

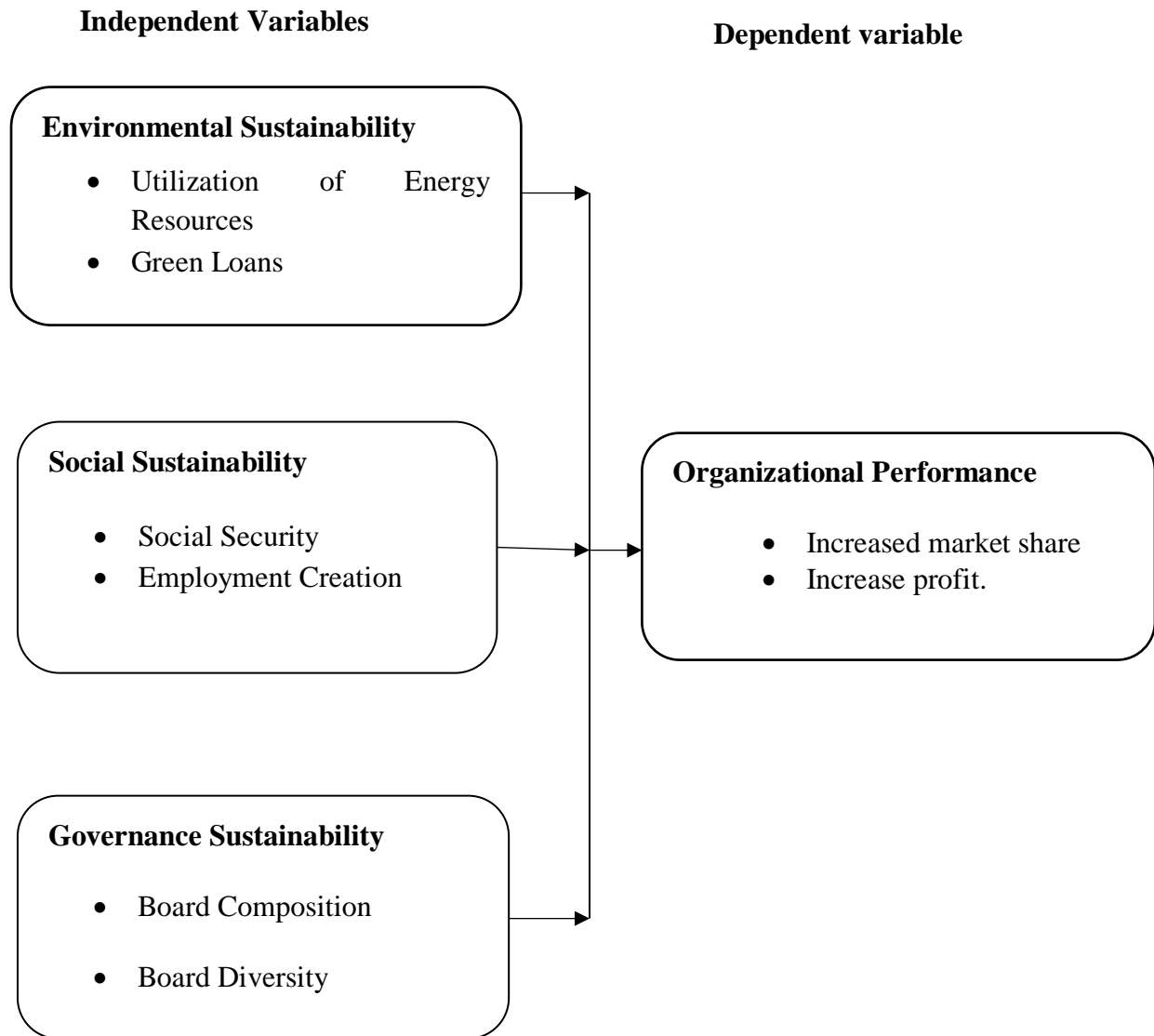
Odero and Egezza (2021) examined the extent to which performance of DT-SACCOs in Kenya is influenced by their board diversity. Both descriptive and cross-sectional research

approaches were adopted. Stratified and simple random approaches were also employed for sample selection. Descriptive statistics and content analysis were adopted during the process of data analysis. Upon the analysis, it was established that there was a significant association between board diversity and their overall financial performance. The study however presents a contextual gap since it examined DT-SACCOs across the country while the current one will only target banking institutions trading their stocks at NSE.

#### **2.4 Conceptual Framework**

A conceptual framework is a diagrammatical representation of the relationship between a study's dependent and independent variables. The independent variables in this scenario are environmental sustainability, social sustainability, and governance sustainability while organizational performance constitutes the dependent study variable .





**FIGURE 2. 1: Conceptual Framework**

### 2.4.1 Measurement of Variables

The environmental sustainability was measured through indicators such as the utilization of energy resources and bio-diversity management. The utilization of energy resources was measured by assessing the bank's energy consumption patterns, renewable energy initiatives, and efforts to minimize carbon emissions. Bio-diversity management was also measured by evaluating the bank's involvement in conservation and preservation activities, as well as its adherence to environmental regulations and standards.

The variable of social sustainability was measured through indicators like social security and employment creation. Social security indicators were measured by examining the bank's initiatives to provide financial protection and support to its employees and their families, such as pension schemes or healthcare benefits. Employment creation was also measured by assessing the bank's efforts to generate job opportunities, particularly for marginalized groups, and its contribution to reducing unemployment rates.

The variable of governance sustainability was measured through indicators like board composition and board diversity. Board composition was measured by evaluating the qualifications, skills, and experience of board members, as well as their independence from management. Board diversity, on the other hand, was measured by assessing the representation of different genders, ethnicities, and backgrounds on the board, as well as the bank's commitment to promoting diversity and inclusion.

Finally, the variable of organizational performance was measured through indicators like increased market share and increased profit. Increased market shares further measured by comparing the bank's market presence and customer base over time, as well as its ability to attract and retain clients in a competitive environment. Increased profit was also measured by analysing the bank's financial statements, including its revenue growth, cost management, and profitability ratios like return on assets or return on equity. These indicators provide insights into the bank's overall performance and its ability to achieve sustainable growth.

## 2.5 Operationalization of Variables

TABLE 2. 1:

Operationalization of Variables

Variable	Indicators	Measurement Scale	Method of Data Collection	Data Analysis
<b>Environmental Sustainability</b> Independent Variable	Utilization of Energy Resources Bio-Diversity Management	Likert/ordinal	Administering Questionnaires	Frequencies and percentages
<b>Social Sustainability</b> Independent Variable	Social Security Employment Creation	Likert/ordinal	Administering Questionnaires	Frequencies and percentages
<b>Governance Sustainability</b> Independent Variable	Board Composition Board Diversity	Likert/ordinal	Administering Questionnaires	Frequencies and Percentages
<b>Organizational Performance</b> Dependent Variable	Increased market share Increase profit.	Likert/ordinal	Administering Questionnaires	Frequencies and percentages

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The chapter will evaluate a detailed methodology that the researcher will follow in order to be in a position of completing the study. Specifically, the chapter will cover research design, target population, sampling approach and sample size, instrumentation and data processing and analysis, model summary as well as diagnostic tests.

#### **3.2 Research Design**

Research design entails detailed strategy which a researcher follows/chooses to be able to complete a given study in a more detailed and coherent manner (Dannels, 2018). Also, it encompasses the general plan devised to be able to undertake the given research and ensure that all the set objectives are attained in a more effective manner. It also comprises of the blueprint adopted by the researcher for the purpose of collecting, measuring and analysis the available data. Based on this, a descriptive research design will be adopted so as to provide detailed guidance towards the completion of this study. This is a form of research design which aims to explain thoroughly the status of the identified study variables (Tobi & Kampen, 2018). Descriptive research design will be adopted in this case as it will make it possible for the existing research problem to be explored in a more detailed manner by the researcher (Bloomfield & Fisher, 2019).

#### **3.3 Target Population**

According to Dahabreh and Hernán (2019), the term "target population" often refers to the complete group of items/objects from which research seeks to get a small number of the objects in order to operate as the wholesome representation of the entire population. In other words, researchers try to find a sample that is representative of the full population. Also, target population is considered as an entire set of units/items upon which research data will be

obtained in order to make inferences about the population. As such, the target population of the current survey will comprise of all the 39 commercial banks that are currently licensed and operating across the country (CBK, 2022). The unit of analysis is commercial banks with a target of three senior finance officers from each bank leading to a target population of 117 respondents. The study chose three respondents from each bank to increase the credibility and validity of the research findings.

### **3.4 Sampling Technique and Sample Size**

According to Sharma (2017), a sampling method/technique is a thorough methodology that involves selecting or picking a sample as a representative of the larger item for the purposes of including it in a study. This is done for the reasons of inclusion in a study. This study will adopt a census of all the 117 finance officers because of the small population and with an aim of increasing the accuracy and precision of the findings.

### **3.5 Data Collection Procedure**

The process of collecting data comprises searching for and gathering crucial information on objects/subjects that are of interest to the researcher in an organized and systematic manner (Siedlecki, 2020). This helps the researcher to receive answers to the questions that are the focus of the study. As such, the study will use primary data set. Primary data set will be obtained using structured questionnaire. Structured questionnaire will be administered to the study targeted respondents based on drop and pick approach whereby the researcher will deliver the questionnaires to the targeted individuals across all the banks and pick them later after they are completed (Dahabreh & Hernán, 2019). Adoption of such a strategy is deemed to be more effective in terms of cost and time saving.

### **3.6 Data Processing and Analysis**

Data analysis is considered as the general approach that involves cleaning, modelling as well as modelling the data that has been obtained to establish if it is useful to use in the study and

be able to draw conclusion. In addition, the process can be regarded as the procedure of extracting data from raw sources and analyzing it to make the final decision based on the obtained (Clark & Vealé, 2018). Data obtained in the current study will be examined to prove that it is complete after which it will be entered into STATA computer software for analysis purposes. Both descriptive and inferential statistical approaches will be applied while analyzing the data. To make the findings of the study more easily to understand, descriptive statistical presentation tools specifically mean and standard deviation will be utilized, while inferential statistical presentation approaches such as Pearson's correlation coefficient and multiple regression analysis will be utilized.

Upon the completion of data analysis, multiple linear regression models will be applied to establish the strength of the relationship between various study variables. The adopted model will be as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

$Y$  = Organizational Performance

$\beta_0$  = Intercept term

$\beta_i$  = coefficients of the independent variables

$X_1$  = Environmental Sustainability Practice

$X_2$  = Social Sustainability Practice

$X_3$  = Governance Sustainability Practice

$\varepsilon$  = error term

### **3.7 Diagnostic Tests**

#### **3.7.1 Multicollinearity Test**

It is regarded as the occurrence whereby a high-intercorrelation between at least two independent variables is observed (Mohammadi, 2022). To detect multicollinearity, Variance Inflation Factor (VIF) will be used to establish both the correlation and strength of such

correlation between independent and dependent study variables. In this case, a VIF value of between 1-10 will be an indication that multicollinearity doesn't exist whereas a value of less than 1 or more than 10 will be an indication that multicollinearity does exist.

### **3.7.2 Normality Test**

This is utilized in statistics to try and establish whether a given data set is well-modelled by a normal distribution (Osborne & Waters, 2019). This in turn makes it possible to compute and establish the likelihood of a random variable from a given data set to be normally distributed. In this case, the normality test will be tested using Jarque-Berra test.

### **3.7.3 Heteroscedasticity Test**

Heteroscedasticity is a term used in statistics to describe situations in which the error variance does not remain constant (Rice, Wirjanto & Zhao, 2020). As such, heteroscedasticity is utilized in testing linear regression model based on the assumption that all error terms are simply normally distributed. Breusch-Pagan-Godfrey test will be used to test heteroscedasticity whereby a P-Value less than 0.05 is an indication that a constant variance exists, hence, accepting the null hypothesis and rejecting the alternative hypothesis.

### **3.8 Ethical Consideration**

During the study, the researcher will observe a few measures that will be aimed to regulate against any possible ethical issue. First, the researcher will obtain a personal introductory letter from KCA university for data collection purposes. In addition, a letter granting the researcher permission to collect data will be obtained from National Commission for Science, Technology & Innovation (NACOSTI). During data collection, the researcher will explain to participants about voluntary nature of their participation and that they could opt not to participate at any given. To ensure privacy, researcher will instruct study participants not to write their names on the questionnaires and not to leave any mark that could make them be identified. Lastly, the

researcher will assure participants that all the data that will be obtained will be kept confidential and will only to be used for academic purpose pertaining to the current study only.



## **CHAPTER FOUR**

### **RESEARCH FINDINGS**

#### **4.1 Introduction**

This chapter presents a comprehensive analysis of the data collected in response to the research objectives outlined in chapter one. The chapter begins with an overview of the response rate, providing insight into the extent of participation from the selected respondents. Following this, the reliability test is discussed, the background findings of the respondents providing contextual information about the participants, shedding light on their demographics, experiences, and perspectives. Diagnostic tests are then employed to assess the underlying assumptions of the statistical techniques used in the study and the study variable findings encapsulate the core outcomes of the research through descriptive (mean and standard deviation) and inferential statistics (correlation, ANOVA and regression analysis).

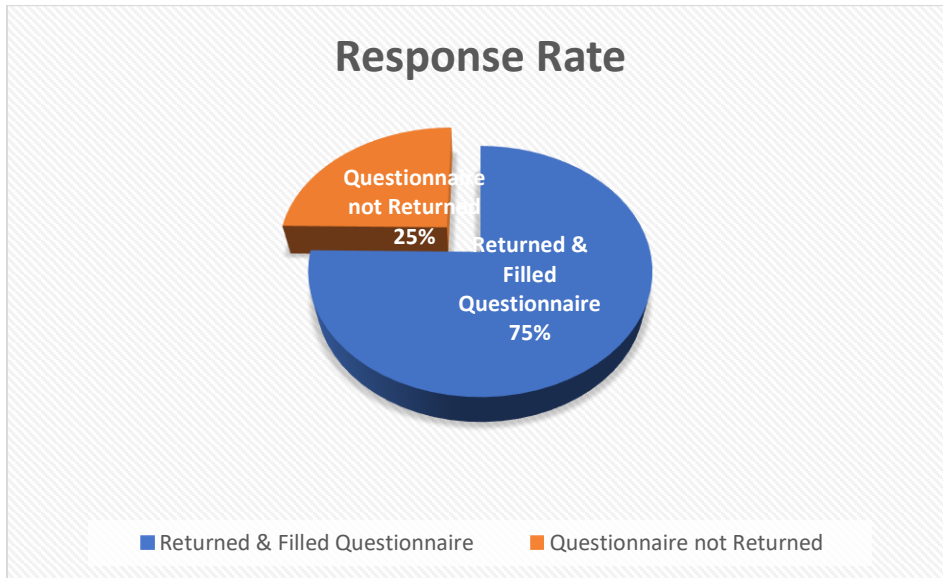
#### **4.2 Response Rate**

The study aimed to reach out to 117 finance officers working for various commercial banks licensed to operate in Kenya by Central Bank of Kenya. Out of 117 questionnaires distributed, a commendable 75.2% response rate was achieved, with 88 respondents providing complete responses. This high response rate is considered as not only adequate but also highly representative of the target population, aligning with the criteria suggested by Hennink et al. (2020), who recommend a response rate exceeding 50%. Additionally, Sileyew (2019) emphasizes that a response rate of 60% and above is sufficient to ensure representativeness. In comparison to past studies, this response rate stands out. For example, Saunders, Lewis and Thornhill (2011) reported a response rate of 81%, while Ledikwe et al. (2019) achieved a response rate of 72%. These notable differences underscore the effectiveness of the data

collection process in the current study, showcasing a higher level of engagement from the respondents. The details are visually represented in Figure 4.1 below for reference.

**FIGURE 4. 1**

**Response Rate**



Source: Author (2023)

### **4.3 Reliability Test**

Creswell and Creswell (2017) define reliability testing as the determination of the extent to which the study results will remain consistent over a certain period. They further noted that if the study results remained unchanged under the same methodology and research instrument will only be considered reliable if the findings will give the same conclusions to the general population. To assess the questionnaire's ability to accurately measure its intended constructs, this study conducted a reliability test employing Cronbach's Alpha coefficient. A Cronbach's Alpha value of at least 0.7 is typically considered acceptable for this purpose (Adeniran, 2019). The study revealed that the questionnaires achieved an average Cronbach's Alpha coefficient of 0.839, indicating a commendable level of consistency in the responses. Consequently, it is appropriate to employ these questionnaires for investigating the effect of sustainability finance

practices on organizational performance among listed commercial banks in Kenya. The specific results are depicted in Table 4.1 below:

**TABLE 4. 1**  
**Summary of Reliability Results for the Study**

<b>Variable</b>	<b>Component</b>	<b>Cronbach's Alpha Coefficient</b>	<b>No. of Items</b>	<b>Interpretation for the study</b>
Environmental Sustainability Practices	<ul style="list-style-type: none"> <li>○ Utilization of energy resources</li> <li>○ Green loans</li> </ul>	0.911	6	Reliable
Social Sustainability Practices	<ul style="list-style-type: none"> <li>○ Social security</li> <li>○ Employment creation</li> </ul>	0.820	5	Reliable
Governance Sustainability Practices	<ul style="list-style-type: none"> <li>○ Board composition</li> <li>○ Board diversity</li> </ul>	0.891	5	Reliable
Organizational Performance	<ul style="list-style-type: none"> <li>○ Increased market share</li> <li>○ Increased profits</li> </ul>	0.733	5	Reliable
<b>Overall</b>		<b>0.839</b>		<b>Instrument reliable</b>

#### **4.4 Findings on the Background of the Respondents**

This section presents findings on the demographic characteristics of respondents which include, respondent's age, gender, level of education, years of experience.

##### **4.4.1 Respondents Age**

The study sought to establish the distribution of the respondents in terms of age. Table 4.2 presents the results of the age distribution among the respondents. The results show that the

majority (39%) of respondents were between 31-40 years old closely followed by 41-50 years old bracket at 38% of the total population. Over 75% of respondents were between 31-50 years old, which may be attributed to the fact that these groups form most of the citizens in Kenya as reported by Kenya National Bureau of Statistics in the census of 2019.

The distribution of respondents across different age groups brings a diverse range of perspectives and experience levels. This diversity enriches the study's findings by incorporating insights from individuals at various stages of their careers. The distribution of the respondents across the age group implies that all age groups were represented in the study and therefore biasness towards sole age group was eliminated. Responses from different age groups may align with the hierarchical structure of commercial banks. Younger respondents may offer insights from entry-level or early-career positions, while older respondents may provide a more strategic or executive-level viewpoint.

**TABLE 4. 2**  
**Respondents' Age Distribution**

Age (Years)	Frequency	Percentage (%)
18-30	8	9%
31-40	34	39%
41-50	33	38%
Over 50 Years	13	15%
<b>Total</b>	<b>88</b>	<b>100%</b>

Source: Author (2023)

#### **4.4.2 Respondents Gender**

The respondents were requested to indicate their gender and the results of the findings were presented in table 4.3 below. From the results, out of 88 respondents, 66 were male translating to 75% of the total respondents while 25% were female respondents. These results indicate that majority of the finance officers were male and indicates that both female and male were

represented in the study avoiding skewed responses. The response rate also shows a significant gender imbalance, with a much higher representation of male respondents (75%) compared to female respondents (25%). This gender disparity could potentially influence the study's findings, as perspectives and experiences may differ based on gender. Additionally, it's important to consider potential biases in responses. Respondents' gender may influence their perspectives and attitudes towards sustainability practices and organizational performance. For example, female participants may bring unique insights or experiences related to gender-specific issues within the banking sector.

**TABLE 4. 3**  
**Respondents' Gender Distribution**

<b>Gender</b>	<b>Frequency</b>	<b>Percent (%)</b>
Male	66	75%
Female	22	25%
<b>Total</b>	<b>88</b>	<b>100%</b>

**Source: Author (2023)**

#### **4.4.3 Respondents Level of Education**

The respondents were requested to indicate their highest level of education to establish the level of formal education of each respondent. Table 4.4 presents the distribution of the respondents in terms of the level of education attained. The findings indicate that the majority (59%) of respondents possessed a degree while 26% possessed a diploma and only 15% of the respondents possessed postgraduate. This is proof that the respondents had a formal education and therefore the answers they provided to the research questions were informed and could be credible for data analysis. The varying educational backgrounds of the respondents contribute to a diverse pool of perspectives. Different levels of education bring different skills, knowledge, and approaches to problem-solving. This diversity can enrich the study's findings by providing a range of viewpoints on organizational performance and sustainability practices.

Similarly, most respondents hold bachelor's degrees, indicating a strong theoretical foundation. This balanced representation ensures a comprehensive view that integrates both practical experience (diploma level) and theoretical knowledge (degree level).

**TABLE 4. 4**  
**Respondents' Education Level**

<b>Highest Education Level</b>	<b>Frequency (F)</b>	<b>Percentage %</b>
Diploma	23	26%
Degree	52	59%
Postgraduate	13	15%
<b>Total</b>	<b>88</b>	<b>100%</b>

**Source: Author (2023)**

#### **4.4.4 Respondents Years of Experience**

The study sought to determine the number of years of experience of the respondents in the banking sector. Table 4.5 presents the distribution of the respondents according to the number of years of experience in the banking industry. The findings indicate that the majority (59%) of respondents have work experience between 5 and 10 years with 0 to 5 years' experience recording the least at 11% of the respondents. The findings demonstrate that majority of respondents had over 5 years' experience, and therefore, they were regraded to have adequate knowledge and understanding how the organization's sustainability practices have developed in their respective banks and how it relates to the organizational performance of the bank with regards to the questions posed to them. Additionally, the respondents' answers to the research questions were considered reliable.

**TABLE 4. 5**  
**Respondents Years of Experience**

<b>Years of Experience</b>	<b>Frequency (F)</b>	<b>Percentage %</b>
0-5 Years	10	11%

5-10 Years	52	59%
10 Years & Over	26	30%
<b>Total</b>	<b>88</b>	<b>100%</b>

**Source: Author (2023)**

#### 4.4.5 Sustainability Practices

The research aimed to discern the sustainability initiatives that have been integrated by commercial banks. Table 4.6 provides an overview of the respondent distribution concerning these sustainability practices.

**TABLE 4. 6**  
**Sustainability Practices**

<b>Sustainability Practices</b>	<b>Frequency</b>	<b>Percentage %</b>
Diversity and inclusion	13	15%
Healthcare and education access	9	10%
Community engagement and empowerment	35	40%
Labor rights and fair employment	8	9%
Affordable housing and adequate living conditions	23	26%
<b>Total</b>	<b>88</b>	<b>100%</b>

**Source: Author (2023)**

The outcomes of this investigation unveil that a significant proportion (40%) of the participants affirmed that community engagement and empowerment initiatives have been widely embraced by numerous commercial banks. The highest percentage of banks prioritizing community engagement and empowerment aligns with social responsibilities inherent in the banking industry. The emphasis indicates a string commitment to engaging with and uplifting the communities they serve, which can have positive ripple effects on their reputation and customer loyalty. Conversely, labour rights and the implementation of equitable employment practices received the lowest endorsement, with only 9% of respondents indicating adoption. Furthermore, the findings illustrate that commercial banks have taken up a broad spectrum of

sustainability practices encompassing environmental, social, and governance realms. This inclusive approach has contributed to a more balanced and comprehensive set of responses, thereby mitigating any potential biases or imbalances in the data.

The relatively lower percentage (15%) of banks emphasizing diversity and inclusion initiatives demonstrate that this aspect may not be as strongly integrated into their operational strategies. However, it is critical to note that a significant proportion of banks still acknowledge its value, which is a positive sign for promoting inclusive workplace culture. Regarding healthcare education and access, the lower percentage (10%) emphasis on the variable may reflect the challenging nature of providing such services within the commercial banks sector. Although, the fact that some banks still prioritize this aspect demonstrates a recognition of their broader societal responsibilities. The substantial emphasis on affordable housing and living conditions by 26% of respondents demonstrate an awareness of the socio-economic challenges faced by many people in Kenya. By addressing this critical areas, commercial banks not only contribute to societal well-being but also potentially stimulate economic growth and stability as espoused by Odero and Egessa (2021).

Generally, the findings demonstrate that Kenyan commercial banks exhibit a commendable commitment to sustainability practices. While community engagement and empowerment receive the highest attention, there is still room for improvement in areas like diversity and inclusion, labour rights, and fair employment. It is important for commercial banks to be alert on the potential positive impact of these sustainability practices not only on society but also on their own long-term financial performance. Like Emojong, Wanyama and Manini (2018), this study findings suggest that balancing social responsibility with financial goals can lead to a more resilient and sustainable banking industry in Kenya.



## 4.5 Findings on Diagnostic Tests

### 4.5.1 Multicollinearity Test

Multicollinearity is a phenomenon in regression analysis where two or more independent variables in a multiple regression model are highly correlated (Daoud, 2017). This can cause problems in the interpretation of the coefficients and can lead to inaccurate and unstable results. Therefore, it was important to perform multicollinearity tests to identify and mitigate this issue. This study employed both the Variance Inflation Factor (VIF) and Tolerance to establish the level of multicollinearity. The findings are presented in table 4.7 below.

**TABLE 4. 7**  
**Multicollinearity Test Results**

Model	Collinearity Statistics		
	Tolerance	VIF	
1	Environmental	0.989	1.013
	Social	0.978	1.004
	Governance	0.957	1.002

**a. Dependent variable: Organizational Performance**

**Source: Author (2023)**

The results reveal that VIF value of all the values for the variables were less than 5, indicating that the variables did not have collinearity. Regarding environmental factors, the VIF (1.013) and tolerance (0.989) indicate that there is very low collinearity associated with the environmental factors. This suggest that it is relatively independent of the other predictors in the model. About social variable, VIF (1.004) and tolerance (0.978) suggest that the social variable also shows a very low collinearity, which means that it is largely independent of the other predictors. Finally, the results on governance variable, that is, VIF (1.002) and tolerance (0.957) indicates that it, too, demonstrates very low collinearity with the other variables in the model.

Given that all the three independent variables have VIF values well below 5, it can be inferred that there is no significant multicollinearity present in this model. This is a positive result as it suggests that each of the independent variables can be assessed for its individual contribution to explaining the variation in the dependent variable, which is organizational performance. The results were found to be consistent with Shieh (2010) who noted that the rule of the thumb indicates that a VIF of 1 demonstrates the presence of collinearity and a VIF of 5 shows that the variables have a high collinearity.

#### 4.5.2 Normality Test

Normality tests are used to determine whether a given dataset follows a normal distribution (Razali & Wah, 2011). According to Razali and Wah (2011), the normal distribution (also known as the Gaussian distribution) is a symmetrical probability distribution commonly used in statistics due to its mathematical tractability and prevalence in many natural phenomena. This study adopted the Shapiro-Wilk Test, which calculates a W statistic that tests the null hypothesis that a sample comes from a normally distributed population. For the Shapiro-Wilk test, the null hypothesis is that the data is normally distributed (Khatun, 2021). If the p-value is greater than the chosen significance level (commonly 0.05), you fail to reject the null hypothesis, suggesting that the data is normally distributed.

The results of the Shapiro-Wilk Test presented on table 4.8, reveal that all the variables had a p value of greater than 0.05. Since the  $p > 0.05$ , the dataset was normally distributed. It further demonstrates that there is linearity of the study variables since they are normally distributed.

**TABLE 4. 8**  
**Normality Test Results**

Kolmogorov-Smirnov <sup>a</sup>	Shapiro-Wilk
---------------------------------	--------------

	<b>Statistic</b>	<b>df</b>	<b>Sig.</b>	<b>Statistic</b>	<b>df</b>	<b>Sig.</b>
Environmental	0.235	2	0.091	0.764	2	0.085
Social	0.317	2	0.024	0.624	2	0.550
Governance	0.335	2	0.2	0.961	2	0.644

**a. Lilliefors Significance Correction**

Source: Author (2023)

### 4.5.3 Heteroscedasticity Test

Heteroscedasticity, also known as non-constant variance, is a violation of one of the assumptions of linear regression (Rice, Wirjanto & Zhao, 2020). According to Teles and Sum Chan (2022), heteroscedasticity occurs when the variance of the error terms in a regression model is not constant across different levels of the independent variable(s). This can lead to problems in interpreting the results and can make the model less reliable. This study employed Breusch-Pagan Test to evaluate heteroscedasticity condition among the study variables. The test results ( $p=0.217$ ) suggest that there is no heteroscedasticity problem because the  $p>0.05$ . The results are presented in table 4.9 below.

**TABLE 4. 9**

**Breusch-Pagan Test for Heteroscedasticity**

Chi-Square	Df	Sig.
1.525	1	0.217

Source: Author (2023)

### 4.6 Descriptive Statistics

In this section, the study utilized mean and standard deviation as the primary descriptive statistics. The assessment of the mean followed the categorization proposed by Amrhein, Trafimow, and Greenland (2019): a mean of 1 to 2.49 was considered very weak, 2.5 to 3.49 was deemed weak, 3.5 to 4.49 was labelled strong, and a mean of 4.5 to 5.00 was characterized as very strong. Similarly, the standard deviation was examined to illustrate the degree of

homogeneity, with a standard deviation of less than 0.5 indicating data heterogeneity (Mishra *et al.*, 2019). According to George and Mallery (2018), data heterogeneity refers to a situation in which a sample population exhibits diverse outcomes. A high standard deviation suggests significant variability among the respondents in the population sample (Andrews, Gentzkow, Shapiro, 2020). If the collected data is homogeneous, it indicates that the respondents possessed a similar understanding of the question and provided comparable answers (Pyzdek, 2021).

#### 4.6.1 Environmental Sustainability Practices and Organizational Performance

The study sought to establish the effect of environmental sustainability practices on organizational performance among the commercial banks domiciled in Kenya. Table 4.10 provides the results of the descriptive statistics of the environmental sustainability practices.

**TABLE 4. 10**  
**Descriptive Statistics on Environmental Sustainability Practices**

<b>Environmental Sustainability Practices</b>	<b>N</b>	<b>Min.</b>	<b>Max.</b>	<b>Mean</b>	<b>Std. Dev.</b>
The bank produces quarterly environmental sustainability report based on its operations	88	1	5	3.55	0.818
There is an environmental policy statement in every bank branch	88	1	5	4.01	0.851
Environmental considerations are always incorporated in every institution decision making process.	88	1	5	4.63	0.475
All potential environmental risks that are likely to arise because of the bank operations have been categorized and recorded.	88	1	5	4.62	0.488
Environmental risk exposure surveys are always undertaken by the bank	88	1	5	3.99	0.856

before issuing out green loans to its clients.

The bank always tasks its greener loans clients to always comply with the set environmental laws and regulation prior to issuing them with loans.	88	1	5	3.87	0.822
<b>Mean Score</b>	<b>88</b>	<b>1</b>	<b>5</b>	<b>4.11</b>	<b>0.718</b>

**Source: Author (2023)**

Table 4.10 provides the scores by the respondents on environmental sustainability practices. The output demonstrates that the mean score was 4.11 with a standard deviation of 0.718. The high mean score shows that environmental sustainability practices are highly adopted by commercial banks in Kenya. The high overall mean shows that a generally high level of commitment to environmental sustainability practices among the commercial banks in the country. Similarly, the standard deviation suggests that while there is a strong commitment overall, there may be some variability in the extent to which these practices are implemented among individual commercial banks. The findings were consistent with Akhter, Yasmin and Faria (2021) findings done in Bangladesh that found that correlation and regression pointed to a beneficial relationship between environmentally responsible banking practices and financial performance, albeit on varying levels.

The statement ‘our bank ensures that all communities likely to be impacted by the projects they finance are well educated’ being the most highly rated (mean=4.63, Std. Dev.=0.475) followed by the statement “all potential environmental risks that are likely to arise because of the bank operations have been categorized and recorded” (mean=4.62, Std. Dev.=0.488). With a high mean score of above 4, it means that commercial banks in Kenya are putting efforts in categorizing and recording potential environmental risks that may arise from their operations. On the same length, the low standard deviation indicates that this practice is

consistent among all commercial banks operating in Kenya. The results concurred with the findings of Lian, Gao and Ye (2022) done in China that performance of commercial banks across China were significantly impacted by the issuance of green credit to their customers.

On the other hand, the statement ‘the bank produces quarterly environmental sustainability report based on its operations’ scoring the least (mean=3.5, Std. Dev.=0.818). However, all statements scored a mean above 3.55 revealing that commercial banks have largely embraced environmental sustainability practices. This can be attributed to the long-term benefits of the banks accrues due to compliance with the regulations and rules put in place by government agencies. The results also suggest that on average, commercial banks tend to produce quarterly environmental sustainability reports based on their activities. The relatively low standard deviation demonstrates that there is moderate consistency across banks in this practice.

The findings of this study were consistent with Thairu and Abuga (2022) that established the performance of manufacturing companies trading at NSE were influenced by green loans. Similarly, the study findings were like Kinyondo and Huggins (2021) that SACCO in Tanzania had adopted environmentally sustainable policies in their anticipation of achieving sustainable operations. In general, the descriptive statistics reveal a positive trend towards environmental sustainability practices among commercial banks in Kenya. The findings reveal a notable commitment to integrating environmental considerations into various aspects of their strategies, with a relatively low variability in most of the practices assessed. This reflects a strong emphasis on responsible environmental stewardship within the banking industry in Kenya.

#### 4.6.2 Social Sustainability Practices and Organizational Performance

The study tried to establish whether social sustainability practices affect organizational performance among commercial banks operating in Kenya. Respondents were required to demonstrate the extent to which each of the statements matched the social sustainability practices activities of their organization. The measurement scale on social sustainability practices consisted of five question items. The results of the response were presented in table 4.11 below.

**TABLE 4. 11**  
**Descriptive Statistics on Social Sustainability Practices**

<b>Social Sustainability Practices</b>	<b>N</b>	<b>Min.</b>	<b>Max.</b>	<b>Mean</b>	<b>Std. Dev.</b>
All staffs in all our branches are effectively trained on how to ensure effective sustainable operations	88	1	5	4.30	0.569
Social risk exposure surveys are always undertaken by the bank before issuing out green loans to its clients.	88	1	5	4.13	0.811
Social/community initiatives are always undertaken from time to time	88	1	5	3.45	0.661
All potential categories of social risks are always identified before extending out credits to its clients	88	1	5	4.29	0.632
Our bank ensures that all communities likely to be impacted by projects they have financed are well educated.	88	1	5	4.31	0.815
<b>Mean Score</b>	<b>88</b>	<b>1</b>	<b>5</b>	<b>4.10</b>	<b>0.698</b>

**Source: Author (2023)**

Results in table 4.11 indicate a very high and close scores on social sustainability practices among commercial banks in Kenya (Mean=4.10, Std. Dev.=0.698). The standard

deviation revealed that the responses by the respondents were the same, that is, there was low variations on the responses. The overall mean score of 4.10 indicates a high level of commitment to social sustainability practices among the commercial banks operating in the country. The standard deviation also suggests that while there is a strong commitment overall, there may be some variations in the extent to which these practices are implemented among individual commercial banks. The findings were like Rehman et al. (2020) that suggested that performance of banks was notably and positively influenced by social sustainability activities. Similarly, These findings concurred with Aifuwa (2020) who suggested that there exists a positive correlation between social sustainability practices with performance of commercial banks in Pakistan.

The highest score was registered on the statement ‘all staffs in all our branches are effectively trained on how to ensure effective sustainable operations’ (Mean=4.30, Std. Dev.=0.569) revealing that on average, commercial banks in Kenya place a significant emphasis on training their staff to ensure effective sustainable operations. The relatively low standard deviation suggests that a high level of consistency in this practice among the commercial banks operating in the country. On the other hand, the lowest rated statement was on ‘social/community initiatives are always undertaken from time to time (mean=3.45, Std. Dev=0.661) indicating that there is a moderately high level of engagement in social and community initiatives. The lower mean score may suggest that while the initiatives are undertaken, they might not be as pervasive as other practices. The standard deviation also reveals that there exists some variability among the commercial banks in this regard.

According to Rehamn *et al.* (2020), there existed an adverse relationship between social sustainability and financial performance of the Islamic commercial banks using the OLS, panel corrected standard errors and generalized least squares techniques. The study findings



confirmed Rehamn et al. (2020) conclusion that social sustainability practices have a negative perception on financial performance of commercial banks as evidenced by a high mean and low standard deviation. The study results further agree with Wasara and Ganda (2019) that for the sake of the future sustainability of the companies, they need to disclose their social responsibility activities as shown by a high mean and low standard deviation. Generally, the descriptive statistics reveal that there is a positive trend towards social sustainability practices among commercial banks in Kenya. They demonstrate a notable commitment to integrating social responsibility considerations into various aspects of their operations, with relatively low variability in most of the practices assessed. This reflects a strong emphasis on responsible social stewardship within the banking sector in Kenya.

#### **4.6.3 Governance Sustainability Practices and Organizational Performance**

The study sought to evaluate how governance sustainability practices have impacted organizational performance among commercial banks operating in Kenya. The measurement scale for governance sustainability practices were made up of five question items and the respondents were required to reveal the extent to which each of the statement aligned to their organization's use of governance sustainability practices for improving organizational performance. Table 4.12 shows the results regarding governance sustainability practices in commercial banks in Kenya.

**TABLE 4. 12**

#### **Descriptive Statistics on Governance Sustainability Practices**

Governance Sustainability Practices	N	Min.	Max.	Mean	Std. Dev.
Our bank has incorporated extensive gender diversity within our board of directors.	88	1	5	4.75	0.711

Participation of outside directors is encouraged by the bank so as enhance the ability of the firm to invest more on sustainability initiatives.	88	1	5	4.94	0.723
Board of directors' duality ensures that sufficient information regarding the bank sustainable practices is released to members of public to avoid information asymmetry.	88	1	5	4.38	0.899
There is a governance policy statement in every bank branch	88	1	5	3.97	0.742
There is nationality diversity within our board of directors	88	1	5	4.44	0.821
<b>Mean Score</b>	<b>88</b>	<b>1</b>	<b>5</b>	<b>4.50</b>	<b>0.779</b>

**Source: Author (2023)**

Table 4.12 results reveal that overall mean score on governance sustainability practices was 4.50 and standard deviation of 0.846. The overall mean score of 4.50 indicates a high level of commitment to governance sustainability practices among the commercial banks in Kenya. The standard deviation suggests that while there is a strong commitment overall, there may be some variability in the extent to which these practices are adopted and implemented among individual banks.

The results show very close and high scores on all the statements ranging from a mean score of 3.97 to 4.94 with (average mean score=4.50, Std. Dev.=0.779). The highest mean score was recorded on the statement 'participation of outside directors is encouraged by the bank so as enhance the ability of the firm to invest more on sustainability initiatives' with (mean=4.94, Std. Dev=0.723). With a mean score of 4.94, it appears that banks in Kenya highly encourage the participation of outside directors to enhance the firm's ability to invest in sustainability initiatives. The standard deviation suggests that while this is a common practice, there may still be some variability among banks. The lowest score being recorded on the statement 'there is a

governance policy statement in every bank branch' with (mean=3.97, Std. Dev.=0.742). This indicates that there is a governance policy statement present in every bank branch, though the mean score suggests that this practice may not be as pervasive as others. The standard deviation suggests some variability among the banks in this regard.

Apart from the two statements, all other statements had a mean score of above 4.00, that is, use of governance sustainability practices is embraced among all commercial banks in Kenya. The results demonstrate that commercial banks operating in Kenya have adopted governance sustainability practices to ensure an improved organizational performance. The results of the study were consistent with the findings by Rahi *et al.* (2021) and Guney *et al.* (2020) that indicated that board diversity had a significant impact on overall organizational performance. Further, the findings of the study agreed with Rahi *et al.* (2021) that governance sustainability practices have a greater influence on organizational performance.

#### **4.7 Co-efficient of Correlation**

This part presents the correlation coefficient for the study variables. The study adopted the spearman's rho correlation analysis model to evaluate the relationship between the independent variable (sustainable finance practices) and the dependent variable (organizational performance) and present the extent of the strength of the relationship. Spearman's rank correlation coefficient, often denoted as  $\rho$  (rho), is a non-parametric measure of statistical dependence between two variables (Pearson, 1909). It assesses the strength and direction of the monotonic relationship (which is a type of relationship that is consistently increasing or decreasing) between them (Weisstein, 2006).

Spearman's rho correlation analysis was chosen for this study because it is specifically designed to evaluate the monotonic relationship between various variables, as advocated by Pearson (1909). Furthermore, the study utilized an ordinal scale, employing a 5-point Likert

scale to gauge levels of agreement or disagreement, a methodology endorsed by Gupta and Kapoor (2020) as appropriate for analysing relationships. Similarly, Coronel *et al.* (2022) pointed out that the strength of the relationship between variables would be assessed using the correlation coefficient. This coefficient, which varies between -1 and 1, was exemplified by Krapavickaitė (2022). According to Gauthier (2011) a correlation coefficient greater than zero signifies a positive correlation, less than zero indicates a negative correlation, while a coefficient of zero suggests no discernible relationship between the variables.

**TABLE 4. 13**  
**Correlation Analysis Results**

		<b>Environmental</b>	<b>Social</b>	<b>Governance</b>	<b>Performance</b>	
<b>Spearman 's rho</b>	<b>Environmental</b>	Correlation Coefficient	1.000	0.458**	0.532**	0.372**
		Sig. (2-tailed)		0.001	0.000	0.000
		N	88	88	88	88
	<b>Social</b>	Correlation Coefficient	0.456**	1.000	0.533**	0.486**
		Sig. (2-tailed)	0.001		0.001	0.000
		N	88	88	88	88
	<b>Governance</b>	Correlation Coefficient	0.538**	0.502**	1.000	0.625**
		Sig. (2-tailed)	0.000	0.000		0.001
		N	88	88	88	88
	<b>Performance</b>	Correlation Coefficient	0.337**	0.398**	0.620**	1.000
		Sig. (2-tailed)	0.000	0.000	0.001	0.000

\*\*Correlation is significant at the 0.01 level (2-tailed)

**Source: Author (2023)**

The correlation analysis carried out revealed that there exist a positive and moderate association between environmental sustainability practices and organizational performance among the commercial banks in Kenya (correlation coefficient = +0.337,  $p < 0.05$ ). The spearman's rho correlation analysis also demonstrated that there existed a positive and moderate relationship between social sustainability practices and organizational performance at 95% confidence level (Correlation coefficient = +0.398,  $p < 0.05$ ). Regarding governance sustainability practices, the correlation analysis suggests that there is a positive and strong relationship between governance practices and organizational performance of commercial banks at 95% confidence level (correlation coefficient = 0.620,  $p < 0.05$ ).

#### **4.8 Analysis of Variance (ANOVA)**

Analysis of Variance (ANOVA) is a statistical technique used to compare means among different groups or categories (Connelly, 2021). It is particularly useful when there are more than two groups and the researcher wants to determine if there are significant differences between them (Das *et al.*, 2022). ANOVA decomposes the total variation in the data into two components: variation between groups and variation within groups. **Between-group Variation:** This is the variation in the means of different groups (Thango, 2022). If this variation is large relative to the variation within groups, it suggests that there are significant differences between the groups (Sharma *et al.*, 2020). **Within-group Variation:** This is the variation within each group. It represents the random variability or noise within the groups (Sharma *et al.*, 2020).

The regression model was tested using ANOVA to determine its significance. Table 4.14 presents the ANOVA results of the study.

**TABLE 4. 14**  
**Analysis of Variance Results**

ANOVA					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	48.072	3	16.024	78.877	0.000
1 Residual	42.212	84	0.578		
<b>Total</b>	<b>90.284</b>	<b>87</b>			

**Source: Author (2023)**

The ANOVA results indicate that the model is statistically significant in predicting how sustainable finance practices influence organizational performance among commercial banks operating in Kenya (F-value=78.88;  $p < 0.05$ ). Since  $p < 0.05$ , this suggests that the model is significant at 95% confidence level and that the variables in the equation are important in predicting organizational performance of commercial banks.

#### **4.9 Regression Analysis**

The study conducted a multivariate linear regression to determine whether sustainable finance practices (environmental, social, and governance) explained the variability in organization performance of commercial banks operating in Kenya. In the regression analysis, independent variable was sustainable finance practices and measured by environmental, social and governance sustainability practices while the dependent variable was organizational performance of commercial banks. Table 4.15 presents the regression analysis results of the study.

**TABLE 4. 15**  
**Regression Analysis Results**

Model Summary
---------------

<b>Model</b>	<b>R</b>	<b>R-Square</b>	<b>Adj. R-Square</b>	<b>Std. Error of the Estimate</b>		
1	0.757	0.573	0.564	0.4332		
<b>Regression coefficients</b>						
<b>Model</b>	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>	<b>t</b>	<b>Sig.</b>	
1	Constant	1.31	0.076	0.013	17.237	0.000
	Environmental	0.08	0.332	0.192	0.241	0.044
	Social	0.197	0.046	0.662	4.283	0.000
	Governance	0.583	0.081		7.198	0.000

**Source: Author (2023)**

The results in table 4.15 reveal that there exists a direct relationship between the dependent and independent variables involved in the study. The findings further suggest that there is a strong coefficient of determination between the sustainable finance practices and organizational performance (R=0.757). Furthermore, it is evident that the coefficient of determination is strong and significant (R-Square= 0.573;  $p < 0.05$ ). This suggests that 57.3% of the variation in organizational performance was because of environmental, social and governance sustainability practices.

The results indicate that the regression weights of the three independent variables were significant as demonstrated by the results of each construct in table 4.15 above. Environmental sustainability practices (B=0.08;  $p < 0.05$ ), social sustainability practices (B=0.197;  $p < 0.05$ ), and governance sustainability practices (B=0.583;  $p < 0.05$ ). These results reveal that the relationship between the study variables was significant at the 5% significance level.

The unstandardized coefficients indicate a corresponding change in the dependent variable when a change of one unit is triggered in the independent variables. Therefore, a

change in environmental sustainability practices by 1% will result in a change in organizational performance by 8.0%, a change in social sustainability practices by 1% will result in a change in organizational performance by 19.7%, and a 1%-unit change in governance sustainability practices will result in 58.3% change in organizational performance.

Therefore, the regression equation is.

$$Y = 1.31 + 0.08X_1 + 0.197X_2 + 0.583X_3 + \epsilon$$

Y=influencer marketing (comprises of digital, celebrity and expert influencers)

+0.08X<sub>1</sub>= the coefficient of environmental sustainability practices, which means that for every unit increase in environmental sustainability practices, organizational performance increase by 0.08 units holding other variables constant.

+0.197X<sub>2</sub>= the coefficient of social sustainability practices, which reveals that for every unit increase in social sustainability activities it will result in an increase in organizational performance by 0.197 units when all factors remain constant.

+0.583X<sub>3</sub>= the coefficient of governance sustainability practices, which reveals that for every unit increase in governance sustainability activities, organizational performance increases by 0.583 when all other factors are held constant.



## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents a summary of the study, discussion of the key findings with respect of the study objectives, conclusion, and recommendations on sustainability finance practices among the commercial banks in Kenya.

#### 5.2 Summary of the Study

The main purpose of this study was to investigate the effect of sustainability finance practices on organizational performance of commercial banks in Kenya. To achieve the main purpose of the study, the researcher focused on three specific objectives: to examine the effect of environmental, social and governance sustainability practices on organizational performance among commercial banks in Kenya. The study was confined 39 commercial banks licensed by the Central Bank of Kenya that were believed to have embraced sustainability finance practices. The study targeted three senior finance officers from each bank because they are believed to have knowledge on sustainability finance practices their respective banks have adopted.

The study's findings were anchored on agency theory, stakeholders' theory, and legitimacy theory to determine the relationship between sustainability finance practices and organizational performance of commercial banks in Kenya. The study sought to fill the research gap based on contextual, conceptual, methodological, theoretical, and empirical elements. Contextually, the study was conducted in Kenyan banking sectors, where Kenya is categorized under developing countries while many of the past studies reviewed were done in developed economies. Also, conceptually, the study adopted the legitimacy theory on sustainability framework (Dowling & Pfeffer, 1975).

The study was quantitative in nature and adopted descriptive research design as its methodology in conducting the research. The study targeted all the 39 commercial banks operating in Kenya as licensed by Central Bank of Kenya. A census of all the banks were conducted with 117 senior finance officers, three from each commercial bank formed the respondents. Data was collected from the respondents utilizing a structured questionnaire. The collected data was sorted, cleaned, and analysed using STATA computer software getting the descriptive and inferential statistical analysis.

The response rate was 75.20%, which was considered adequate for data analysis. Descriptive statistics showed that commercial banks in Kenya have adopted sustainable finance practices to boost organizational performance. The correlational analysis on the other hand, demonstrated that the independent variables (environmental, social and governance) had a positive and significant relationship with the dependent variable (organizational performance).

### **5.3 Discussion of Study Findings**

The main aim of the study was to examine the relationship that exist between sustainability finance practices and organizational performance of commercial banks domiciled in Kenya. The study findings revealed some resemblance with previous studies while some other findings gave a divergent and contradicting results in relation to sustainability finance practices and organizational performance. The study findings are discussed below in relation to the research questions and specific objectives.

#### **5.3.1 Environmental Sustainability Practices and Organizational Performance**

The study investigated the effect of environmental sustainability practices on organizational performance of commercial banks licensed to operate in Kenya, the descriptive statistics findings indicated that commercial banks in Kenya produces quarterly environmental sustainability reports based on their operations. In terms of environmental sustainability, the banks exhibit a strong inclination towards responsible operations. They frequently produce

environmental sustainability reports and ensure the presence of environmental policy statements in all branches. Notably, environmental considerations are consistently factored into decision-making processes, reflecting a robust commitment to eco-conscious practices. Additionally, potential environmental risks are diligently categorized and recorded.

The findings also reveal that commercial banks in Kenya have adopted environmental policy statement in every bank branch and environmental considerations are always incorporated in every activity of the bank. The descriptive statistics further demonstrates that commercial banks have a categorized environmental risk that may arise during their daily operations. Similarly, the results showed that all banks have embraced green loans that always complies with the set environmental laws and regulations. The study also found that commercial banks enabled environmental sustainability practices for boosting their performance. Most of the commercial banks had designed environmental sustainability practices with a major aim of improving organizational performance.

### **5.3.2 Social Sustainability Practices and Organizational Performance**

The study examined the effect of social sustainability practices on organizational performance of commercial banks domiciled in Kenya. Turning to social sustainability, the findings reveal a proactive approach. Banks prioritize comprehensive training for staff on sustainable operations and consistently conduct social risk exposure surveys prior to issuing green loans. The study also highlights a commitment to community well-being, as social/community initiatives are undertaken regularly. Moreover, the banks exhibit a high level of diligence in identifying social risks before extending credits to clients.

Descriptive statistics revealed that commercial banks have trained their employees with an aim of ensuring effective and sustainable operations. In addition, the commercial banks conduct regular social risk exposure surveys mostly before issuing green loans to their clients. The study also established that commercial banks undertake social/community initiatives on

regular basis as well as list all potential categories of social risk identified prior extending credit facilities to their clients. Similarly, the study established that commercial banks in Kenya ensure that the communities affected by their projects are well educated. The study also found that social sustainability practice is invaluable in predicting the performance of the commercial banks.

### **5.3.3 Governance Sustainability Practices and Organizational Performance**

In terms of governance sustainability practices, the study revealed that commercial banks have incorporated extensive gender diversity within their board of governance. Regarding governance sustainability, the banks demonstrate a robust commitment to ethical practices. They actively promote gender diversity within their boards of directors and encourage the participation of outside directors to enhance sustainability investments. Transparency is emphasized, with board duality ensuring adequate disclosure of sustainable practices to the public. Additionally, nationality diversity is present within board compositions.

On the same breadth, the study findings indicated that commercial banks encourage participation of external directors with an objective of enhancing the ability of the organization to invest more on sustainability initiatives. In addition, the study demonstrated that commercial banks have embraced board of directors' duality to ensure that sufficient information about banking sustainable practices are relayed to the stakeholders and the community. The study established also that commercial banks had adopted a governance policy statement in every branch and their board of directors reflected national diversities with an aim of boosting organizational performance.

## **5.4 Conclusion**

The study investigated the relationship between sustainability finance practices and organizational performance of commercial banks. Sustainability finance practices were measured by the environmental, social and governance sustainability practices while

organizational performance was measured in terms of increased market share and increased profits. The positive relationship indicated that commercial banks in Kenya have embraced sustainability finance practices as a significant lending strategy in 21<sup>st</sup> century that would guarantee them business competitiveness. The commercial banks are therefore being able to effectively use sustainability finance practices to improve their profits and increase their market share. Commercial banks ought to also be cognizant of the climate changes and the demand from regulatory authorities to incorporate sustainable products, which require that they be responsive to the needs of the environment as well as their customers through sustainability finance practices.

On the other hand, the study investigated the effect of environmental sustainability practices on organizational performance of commercial banks in Kenya and on the other hand, the effect of social sustainability practices on organizational performance of commercial banks in Kenya. In both investigations, the findings were statistically significant and had a positive association implying that an increase in environmental and social sustainability practices, the organizational performance will increase, and the reverse is true. Specifically, as environmental sustainability practices increase in the sector, the commercial banks must adopt environmental sustainability activities that guarantee them to build strong organizational performance, which would lead to adoption of sustainable banking activities. This indicates that the type of sustainability finance practices adopted by commercial banks as the banking strategy would lead to great influence on the relationship between sustainability finance practices and organizational performance of commercial banks operating in Kenya.

Notably, the governance sustainability practices predict the organizational performance of most commercial banks in Kenya. The governance sustainability practices adopted by commercial banks were found to be significant in determining the organizational performance. Based on the findings, the study concludes that the commercial banks required to embrace

board of directors' duality to ensure that sufficient information regarding the bank sustainable practices are released to all stakeholders and the public at large to avoid information asymmetry. The study also concluded that the board of directors of commercial banks ought to reflect a diverse nationality of the directors.

## **5.5 Recommendation**

Based on the discussion of the results and findings of the study, recommendation on policy and practical implications and areas for further research is as follows.

### **5.5.1 Practice**

Based on the findings, the study recommends to the management of commercial banks to seriously consider improving their sustainability finance practices. Special attention should be given to environmental, social and governance sustainability activities carried out by the bank. This will enable the banks improve their organizational performance, which in turn will lead to increase in market share as well as profits. In addition, the management of commercial banks need to consistently improve on sustainable finance practices to build a strong and resilient organizational performance that would enable them to be competitive in the industry.

### **5.5.1 Policy Recommendation**

Agencies and other government institutions mandated to formulate policies on environmental, social and governance sustainability practices should develop policies that will enable commercial banks to adopt sustainable finance practices to generate income and increase market share. This will enable banks increase their organization performance in the industry. Commercial banks are significant players in the development of the economy, and therefore, sustainability finance practices will enhance accessibility and reach a wider market for their products. Since the commercial banks play a significant role in the country's economy, it becomes a matter of policy concern by the government of the day. Moreover, SMEs are being

considered as one key priority sector and therefore the government should focus and intervene to ensure that commercial banks compete favourably on the global market.

### **5.5.3 Limitations of the study and Suggestion for Further Study**

Focusing only commercial banks in Kenya was a limitation because not all registered financial institutions were involved in the study although they could have employed sustainability finance practices to improve their organizational performance. The opinion presented in this study do not represent all the financial institutions that are registered in Kenya; hence, the findings of the study could not be generalized for all the financial institutions operating in Kenya.

The study focused on sustainability finance practices as a discipline in its entirety, therefore, scholars interested in further research could focus on the sustainability finance dimensions individually, environmental sustainability, social sustainability, and governance sustainability practices and their influence on organizational performance of commercial banks in Kenya. Similarly, this study focused on commercial banks in Kenya, therefore, this study recommends a similarly study to be carried out on other sectors of the economy like insurance industry and SACCOs. In addition, apart from environmental, social, and governance sustainability practices, researchers interested in studying sustainability finance practices among commercial banks could study other disciplines that could influence organizational performance.

## REFERENCES

- Abdi, Y., Li, X., & Càmara, X. (2020). Impact of sustainability on firm value and financial performance in the air transport industry. *Sustainability*, 12(23), 9957.
- Adeniran, A. O. (2019). Application of Likert scale's type and Cronbach's alpha analysis in an airport perception study. *Scholar Journal of Applied Sciences and Research*, 2(4), 1-5.
- Adu, D. A. (2022). Sustainable banking initiatives, environmental disclosure, and financial performance. *Business Strategy and the Environment*, 31(5), 2365-2399.
- Aifuwa, H. O. (2020). Sustainability reporting and firm performance in developing climes. *Copernican Journal of Finance & Accounting*, 9(1), 9-29.
- Akhter, I., Yasmin, S., & Faria, N. (2021). Green Banking Practices and Its Implication on Financial Performance of the Commercial Banks in Bangladesh. *Journal of Business Administration*, 42(01).
- Ali, C. B. (2020). Agency theory and fraud. In *Corporate Fraud Exposed* (pp. 149-167).
- Ali, Q., Salman, A., Yaacob, H., Zaini, Z., & Abdullah, R. (2020). Does big data analytics enhance sustainability and financial performance. *The Journal of Asian Finance, Economics and Business*, 7(7), 1-13.
- Amrhein, V., Trafimow, D., & Greenland, S. (2019). Inferential statistics as descriptive statistics: There is no replication crisis if we don't expect replication. *The American Statistician*, 73(1), 262-270.
- Andrews, I., Gentzkow, M., & Shapiro, J. M. (2020). On the informativeness of descriptive statistics for structural estimates. *Econometrica*, 88(6), 2231-2258.
- Bătae, O. M., Dragomir, V. D., & Feleagă, L. (2021). The relationship between environmental, social, and financial performance in the banking sector. *Journal of Cleaner Production*, 290, 125791.
- CBK. (2022). Central Bank of Kenya: Commercial Banks & Mortgage Finance Institutions. Central Bank of Kenya.
- Connelly, L. M. (2021). Introduction to analysis of variance (ANOVA). *Medsurg Nursing*, 30(3), 218-158.



- Coronel, E. D., Das, A., da Silva-Neto, M. L., González, I. R., Gomes, A. S., & Raposo, E. P. (2022). Statistical analysis of intensity fluctuations in the second harmonic of a multimode Nd: YAG laser through a modified Pearson correlation coefficient. *Physical Review A*, 106(6), 6-15.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approach*. Sage publications.
- Daoud, J. I. (2017). Multicollinearity and regression analysis. In *Journal of Physics: Conference Series* (Vol. 949, No. 1, p. 012009). IOP Publishing.
- Das, B. K., Jha, D. N., Sahu, S. K., Yadav, A. K., Raman, R. K., & Kartikeyan, M. (2022). Analysis of variance (ANOVA) and design of experiments. In *Concept Building in Fisheries Data Analysis* (pp. 119-136). Singapore: Springer Nature Singapore.
- EmadEldeen, R., Elbayoumi, A. F., Basuony, M. A., & Mohamed, E. K. (2021). The effect of the board diversity on firm performance. *Corporate Ownership and Control*, 18(3), 337-347.
- Emojong, E. O., Wanyama, K. W., & Manini, M. M. (2018). Corporate sustainability and financial performance of manufacturing firms in Uasin Gishu County, Kenya.
- Erhinyoja, E. F., & Marcella, E. C. (2019). Corporate social sustainability reporting and financial performance of banking industry in Nigeria. *International Journal of Accounting, Finance and Risk Management*, 4(2), 44.
- Fathihani, F., & Saputra, J. (2022). A Review of Sustainable Finance and Financial Performance Literature. *International Journal of Finance, Economics and Business*, 1(1), 1-17.
- Gauthier, T. D. (2011). Detecting trends using Spearman's rank correlation coefficient. *Environmental forensics*, 2(4), 359-362.
- Guney, Y., Karpuz, A., & Komba, G. (2020). The effects of board structure on corporate performance. *Research in International Business and Finance*, 53, 101222.
- Gupta, S. C., & Kapoor, V. K. (2020). *Fundamentals of mathematical statistics*. Sultan Chand & Sons.
- Hennink, M., Hutter, I., & Bailey, A. (2020). *Qualitative research methods*. Sage.

- Iqbal, S., Nawaz, A., & Ehsan, S. (2019). Financial performance and corporate governance in microfinance. *Journal of Asian Economics*, 60, 1-13.
- Jan, A., Marimuthu, M., & Hassan, R. (2019). Sustainable business practices and firm's financial performance in Islamic banking. *Sustainability*, 11(23), 6606.
- Jan, A., Marimuthu, M., bin Mohd, M. P., & Isa, M. (2019). The nexus of sustainability practices and financial performance. *Journal of Cleaner Production*, 228, 703-717.
- Kariuki, F. (2020). Sustainability in the financial sector in Kenya. Available at SSRN 3646976.
- Khatun, N. (2021). Applications of normality test in statistical analysis. *Open Journal of Statistics*, 11(01), 113-119.
- Krapavickaitė, D. (2022). Coherence coefficient for official statistics. *Mathematics*, 10(7), 1159-65.
- Kumar, K., & Prakash, A. (2020). Managing sustainability in banking: extent of sustainable banking adaptations of banking sector in India. *Environment, Development and Sustainability*, 22, 5199-5217.
- Lagoarde, T. (2019). Sustainable finance. *Research in International Business and Finance*, 47, 1-9.
- Ledikwe, A., Roberts-Lombard, M. and Klopper, H.B. (2019), "The perceived influence of relationship quality on brand loyalty: An emerging market perspective," *African Journal of Economic and Management Studies*, 10 (1):85-101. <https://doi.org/10.1108/AJEMS-04-2018-0113>
- Lian, Y., Gao, J., & Ye, T. (2022). How does green credit affect the financial performance of commercial banks. *Journal of Cleaner Production*, 344, 131069.
- Malik, A. H., Jais, M. B., Md Isa, A. H., & Rehman, A. U. (2022). Role of social sustainability for financial inclusion and stability among Asian countries. *International Journal of Social Economics*, 49(9), 1324-1348.
- Mangwa, I. M., & Jagongo, A. O. (2022) Green Financing and Financial Performance of Listed Commercial Banks in Kenya.
- Marwa, N., & Aziakpono, M. (2015). Financial sustainability of Tanzanian saving and credit cooperatives. *International Journal of Social Economics*, 42(10), 870-887.

- Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. *Annals of cardiac anaesthesia*, 22(1), 67-81
- Mohammadi, S. (2022). A test of harmful multicollinearity: A generalized ridge regression approach. *Communications in Statistics-Theory and Methods*, 51(3), 724-743.
- Munir, S., Irfan, M., & Malik, M. S. (2022). Impact of Sustainable Finance on the Firm Performance in Pakistani Banking Sector. *Indian Journal of Economics and Business*, 21(2).
- Musa, H. (2020). Corporate governance and financial performance of Nigeria listed banks. *Jour of Adv Research in Dynamical & Control Systems*, 12(1).
- Odero, J. A., & Egessa, R. (2021). Towards realization of Board Gender Diversity in Deposit Taking SACCOs in Kenya. *How Africa Has Turned Around*, 125.
- Osborne, J. W., & Waters, E. (2019). Four assumptions of multiple regression that researchers should always test. *Practical assessment, research, and evaluation*, 8(1), 2.
- Pearson, K. (1909). Determination of the coefficient of correlation. *Science*, 30(757), 23-25.
- Pyzdek, T. (2021). Descriptive Statistics. In *The Lean Healthcare Handbook* (pp. 145-149). Springer, Cham.
- Rahi, A. F., Akter, R., & Johansson, J. (2021). Do sustainability practices influence financial performance? Evidence from the Nordic financial industry. *Accounting Research Journal*, 35(2), 292-314.
- Rai, R., Kharel, S., Devkota, N., & Paudel, U. R. (2019). Customers perception on green banking practices. *The Journal of Economic Concerns*, 10(1), 82-95.
- Razali, N. M., & Wah, Y. B. (2011). Power comparisons of shapiro-wilk, kolmogorov-smirnov, lilliefors and anderson-darling tests. *Journal of statistical modelling and analytics*, 2(1), 21-33.
- Rehman, Z. U., Zahid, M., Rahman, H. U., Asif, M., Alharthi, M., Irfan, M., & Glowacz, A. (2020). Do corporate social responsibility disclosures improve financial performance. *Sustainability, Digital Transformation and Fintech*, 297.

- Rice, G., Wirjanto, T., & Zhao, Y. (2020). Tests for conditional heteroscedasticity of functional data. *Journal of Time Series Analysis*, 41(6), 733-758.
- Rice, G., Wirjanto, T., & Zhao, Y. (2020). Tests for conditional heteroscedasticity of functional data. *Journal of Time Series Analysis*, 41(6), 733-758.
- Said, M. S., Annuar, H. A., & Hamdan, H. B. (2019). An investigation into the financial sustainability of Islamic Saving, Credit Cooperative Society (SACCOS) in Tanzania. *International Journal of Ethics and Systems*.
- Saunders, M., Lewis, P., & Thornhill, A. (2011). *Research Methods for Business Students* (2nd ed.). New Delhi: Pearson.
- Sharma, G. K., Johar, A. K., Kumar, T. B., & Boolchandani, D. (2020). Effectiveness of Taguchi and ANOVA in design of differential ring oscillator. *Analog Integrated Circuits and Signal Processing*, 104(3), 331-341.
- Shieh, G. (2010). On the misconception of multicollinearity in detection of moderating effects: Multicollinearity is not always detrimental. *Multivariate Behavioral Research*, 45(3), 483-507.
- Sileyew, K. J. (2019). *Research design and methodology* (pp. 1-12). Rijeka: IntechOpen.
- Soumya, S. (2019). Green banking: a sustainable banking for environmental sustainability. *CLEAR International Journal of Research in Commerce & Management*, 10(7).
- Teles, P., & Sum Chan, W. (2022). The use of aggregate time series for testing conditional heteroscedasticity. *Statistics*, 56(6), 1242-1269.
- Thairu, P. K., & Abuga, I. (2022). Influence of Green Loans on Performance of Manufacturing Firms Listed on Nairobi Securities Exchange, Kenya.
- Thango, B. A. (2022). Application of the Analysis of Variance (ANOVA) in the Interpretation of Power Transformer Faults. *Energies*, 15(19), 7224-29.
- Uyanto, S. S. (2020). Power comparisons of five most used autocorrelation tests. *Pakistan Journal of Statistics and Operation Research*, 119-130.

- Vitolla, F., Raimo, N., & Rubino, M. (2020). Board characteristics and integrated reporting quality. *Corporate Social Responsibility and Environmental Management*, 27(2), 1152-1163.
- Wafula, D. N., Mutua, S. M., & Musiega, M. G. (2017). Influence of financial performance on financial sustainability of microfinance institutions in Kenya. *International Journal of Management and Commerce Innovations*, 4(2), 295-302.
- Wainaina, F. (2019). Effect Of Corporate Sustainability Strategies on Financial Performance of Deposit Taking Saccos in Nairobi, Kenya (Doctoral dissertation, Kca University).
- Weisstein, E. W. (2006). Correlation coefficient. <https://mathworld.wolfram.com/>.

## **APPENDIX I: INTRODUCTION LETTER**

**ALBERT OMARE**

**P.O BOX**

**NAIROBI**

**Dear Sir/Madam,**

### **RE: INTENDED PARTICIPATION IN THE RESEARCH PROJECT**

Your kind attention is drawn to issue. You have been carefully selected to take part in this research study titled “**Effect of sustainability Finance Practices on Organizational Performance Among Listed Commercial Banks in Kenya**”.

Kindly fill this questionnaire and return it to the undersigned. Any information given by you.

will be treated with utmost confidentiality and only for the purpose of the current research and shall not be divulged to anybody without your

express approval .

Thanks in advance for your anticipated cooperation

**Albert Omare**

## APPENDIX II: RESEARCH QUESTIONNAIRE

### **Section A: Demographic Information**

Please respond to the questions by ticking in the boxes were appropriately.

#### **Respondents Age**

18 to 30 Years [ ]

31 to 40 Years [ ]

41 to 50 Years [ ]

Over 50 Years [ ]

#### **Respondents Gender**

Male [ ]

Female [ ]

#### **Highest Education Level**

Diploma [ ]

Degree [ ]

Post Graduate [ ]

#### **Years working at the bank**

0 – 5 Years [ ]

5 - 10 Years [ ]

Over 10 Years [ ]

#### **Which social sustainability practices your organization has adopted?**

- i. Diversity and inclusion
- ii Healthcare and education access
- iii Community engagement and empowerment
- iv Labor rights and fair employment
- v Affordable housing and adequate living conditions

## Section B

### A: Environmental Sustainability Practices and Organizational Performance

Kindly indicate the extent to which you agree with the following statements regarding environmental sustainability practice and organizational performance of commercial banks in Kenya. Use a scale of 1-5, where (1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Strongly agree) .

Statements	1	2	3	4	5
The bank produces quarterly environmental sustainability report based on its operations					
There is an environmental policy statement in every bank branch					
Environmental considerations are always incorporated in every institution decision making process.					
All potential environmental risks that are likely to arise because of the bank operations have been categorised and recorded.					
Environmental risk exposure surveys are always undertaken by the bank before issuing out green loans to its clients.					
The bank always tasks its greener loans clients to always comply with the set environmental laws and regulation prior to issuing them with loans.					

### B: Social Sustainability Practices and Organizational Performance

Kindly indicate the extent to which you agree with the following statements regarding social sustainability practice and organizational performance of commercial banks in Kenya. Use a scale of 1-5, where (1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree and 5- Strongly agree) .

Statements	1	2	3	4	5
All staffs in all our branches are effectively trained on how to ensure effective sustainable operations					



Social risk exposure surveys are always undertaken by the bank before issuing out green loans to its clients.

Social/community initiatives are always undertaken from time to time

All potential categories of social risks are always identified before extending out credits to its clients

Our bank ensures that all communities likely to be impacted by projects they have financed are well educated.

---

### **C: Governance Sustainability Practices and Organizational Performance**

Kindly indicate the extent to which you agree with the following statements regarding governance sustainability practice and organizational performance of commercial banks in Kenya. Use a scale of 1-5, where (1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Strongly agree) .

<b>Statements</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Our bank has incorporated extensive gender diversity within our board of directors.					
Participation of outside directors is encouraged by the bank so as enhance the ability of the firm to invest more on sustainability initiatives.					
Board of directors' duality ensures that sufficient information regarding the bank sustainable practices is released to members of public to avoid information asymmetry.					
There is a governance policy statement in every bank branch					
There is nationality diversity within our board of directors					

---

### **D. Sustainability Financial Practices and Organizational Performance**

Kindly indicate the extent to which you agree with the following statements regarding sustainability financial practice and organizational performance of commercial banks in Kenya. Use a scale of 1-5, where (1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Strongly agree)".

	1	2	3	4	5
Our firm's return on assets (ROA) has increased because of adopting ESG					
Prompt loan repayment by clients who have adopted ESG practices					
By enhancing our ESG practices, our profit has increased for the last few years					
High employee retention rate due to enhanced social sustainability practices					
Increased market shares due to enhanced environmental practices					

**THANK YOU**

**APPENDIX IV: RESEARCH BUDGET**

<b>ITEM</b>	<b>AMOUNT</b>
Cyber Bills	4,000
Document Editing	6,000
Printing	3,500
Research Assistants	8,000
Data Entry	12,000
<b>TOTAL</b>	<b>33,500</b>

## **APPENDIX V: LIST OF COMMERCIAL BANKS IN KENYA**

1. African Banking Corp Bank Ltd
2. African Development Bank Group
3. Bank of Africa Kenya Limited
4. Absa Bank of Kenya
5. Bank Of Baroda (Kenya) Ltd
6. CFC Stanbic Bank Kenya Limited
7. Citibank N.A
8. Consolidated Bank of Kenya Limited
9. Cooperative Bank of Kenya Limited
10. Credit Bank Limited
11. Diamond Trust Bank
12. Dubai Bank Kenya Ltd
13. Eco Bank Limited
14. Development Bank of Kenya Ltd
15. Equity Bank Limited
16. Equatorial Commercial Bank Limited
17. Equatorial Investment Bank
18. Family Bank Limited
19. First Community Bank Limited
20. Giro Commercial Bank Limited
21. Guaranty Trust Bank Kenya Limited
22. Guardian Bank
23. Gulf African Bank Limited
24. Habib Bank A. G Zurich
25. I& M Bank Limited
26. Kenya Commercial Bank Limited
27. Kenya Post Office Savings Bank
28. Middle East Bank Limited
29. National Bank of Kenya
30. NCBA Bank Limited
31. Oriental Commercial Bank Limited
32. Paramount Universal Bank Limited
33. Prime Bank Limited
34. Sidian Bank Limited
35. Spire Bank Limited
36. Standard Chartered Bank Limited
37. Transnational Bank Limited
38. UBA Kenya Limited
39. Victoria Commercial Bank Limited.